

SIXTH ANNUAL SOUTHERN CALIFORNIA ECONOMIC SUMMIT

ORANGE COUNTY ECONOMIC UPDATE

**Prepared for the
Southern California Association of Governments**

**Orange County Business Council
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Introduction

In preparation for the sixth annual Southern California Association of Governments (SCAG) Economic Recovery and Job Creation Summit, this report provides an update of the current state of the Orange County economy while also providing future projections for various metrics including population, employment, housing, and international trade. Additional topics discussed here focus on Orange County's economic indicators including:

- Key Existing and Emerging Industries
- Occupational Employment and Salary Growth
- Income and Poverty Statistics
- Educational Attainment Demographics
- Housing Market and Construction Activity

This report was created in order to provide a sound understanding of the current economic landscape within Orange County so that business executives, community leaders, and policymakers are able to better comprehend the current opportunities and pitfalls within the local economy. Additionally, this report hopes to provide a reasonable timeline for when the County will reach pre-recession levels of economic activity, a milestone which has been nearly a decade in the making. Finally, this report provides an analysis of current and projected economic growth and job creation trends so that state and local elected officials, public and private sector CEOs, business and labor leaders, stakeholder agency representatives and city managers can plan ahead in adjusting their policies, and operational strategies to remain economically competitive, both locally and nationally.

Employment Estimations for Economic Recovery

The 2016 Economic Forecast, an annual report created by California State University Fullerton (CSUF), provides industry employment projections through 2017 for Orange County, Southern California, and the nation. Exhibit 2.1, provided below, highlights these projections and provides an indication on which industries have surpassed their pre-recessionary totals in addition to how close other industries in Orange County are to reaching 2007 employment levels.

Exhibit 2.1 CSUF: O.C. Industry Employment

	2007	2014	2015e	2016e	2017e	Est. Annual Growth 2014- 2017
Natural Resources	600	700	700	700	700	-
Construction	103,100	82,000	87,400	93,500	100,400	6,130
Manufacturing	180,400	158,800	162,100	165,400	168,600	3,260
<i>Durable Goods</i>	126,200	116,600	118,600	120,700	122,800	2,060
<i>Nondurable Goods</i>	54,200	42,200	43,500	44,700	45,800	1,200
Wholesale Trade	86,900	81,700	83,100	84,800	86,600	1,630
Retail Trade	161,200	148,700	150,600	153,700	156,900	2,730
Transportation & Utilities	28,900	26,600	27,600	28,700	29,500	960
Information	31,200	24,200	24,200	24,800	25,300	360
Financial Activities	127,700	114,100	116,200	116,900	117,200	1,030
Professional & Business Services	269,100	275,800	283,300	293,100	303,900	9,360
Educational & Health Services	142,700	190,300	198,800	203,500	206,700	5,460
Leisure & Hospitality	172,900	193,500	197,900	202,500	207,000	4,500
Other Services	47,400	47,700	50,700	52,000	52,700	1,660
Government	159,400	151,900	153,600	154,300	155,300	1,130
Total Nonfarm	1,515,800	1,495,900	1,536,100	1,573,800	1,610,800	38,300

Source: California State University Fullerton Economic Forecast 2016

Orange County's three largest industries, Professional & Business Services, Education & Health Services, and Leisure & Hospitality, continue to drive employment growth for the County. This is evidenced by the fact that all three of these industries have reached pre-recessionary employment levels, helping to drive total nonfarm employment to exceed its pre-recessionary levels during mid-2015. Additionally, the Other Services sector was able to reach 2007 employment levels in 2014. According to CSUF's most recent economic forecast, only the Transportation & Utilities industry is projected to achieve pre-recessionary employment levels

in addition to the industries mentioned above, reaching 29,500 jobs in Orange County by 2017, 600 more than its 2007 employment total.

On a positive note, the Construction industry, which was heavily impacted during the recession, is expected to add a staggering 6,130 jobs per year between 2014 and 2017, just behind Professional and Business Services which is expected to add 9,360 during the same time period. Effectively, Orange County's Construction industry will be adding jobs quicker than two of the County's most dominant industries, including Educational & Health Services (5,460 jobs added annually), and Leisure & Hospitality (4,500 jobs added annually). This is especially important as the Construction industry often serves as a barometer of the housing market and this job growth indicates an upswing in economic activity in the near-term.

Overall, in 2015, CSUF estimates that payroll or total nonfarm job growth will expand by 2.7 percent, followed by 2.5 percent in 2016, and 2.4 percent in 2017; representing 40,200, 37,700, and 37,000 new jobs, respectively.

California's faster recovery rate is largely driven by Northern California counties such as San Francisco and Santa Clara, areas that were less impacted by the recession due to the strong concentration of high-tech companies in the region. In addition, these areas experienced tremendous job growth over the past few years due to the high-tech cluster as well.

Exhibit 2.2 Labor Force Participation Rates

Age Group	United States		Orange County			
	Labor Force Participation Rates (%)		Labor Force Participation Rates (%)		% of US Counties with a Lower Participation Rate	
	2007	2014	2007	2014	2007	2014
Overall	64.8	63.3	66.8	65.8	61.7	66.6
16-19 Years Old	44.2	37.6	38.9	27.8	17.8	10.0
20-24 Years Old	74.9	74.1	75.8	74.1	44.6	37.9
25-44 Years Old	81.9	82.0	81.6	82.2	34.7	47.0
45-54 Years Old	80.4	79.9	81.9	83.6	55.3	73.1
55-64 Years Old	62.5	64.2	66.7	69.2	75.9	76.3
65-74 Years Old	23.9	25.3	27.1	29.7	76.2	79.3
75+ Years Old	5.6	6.3	6.8	6.3	75.1	52.3

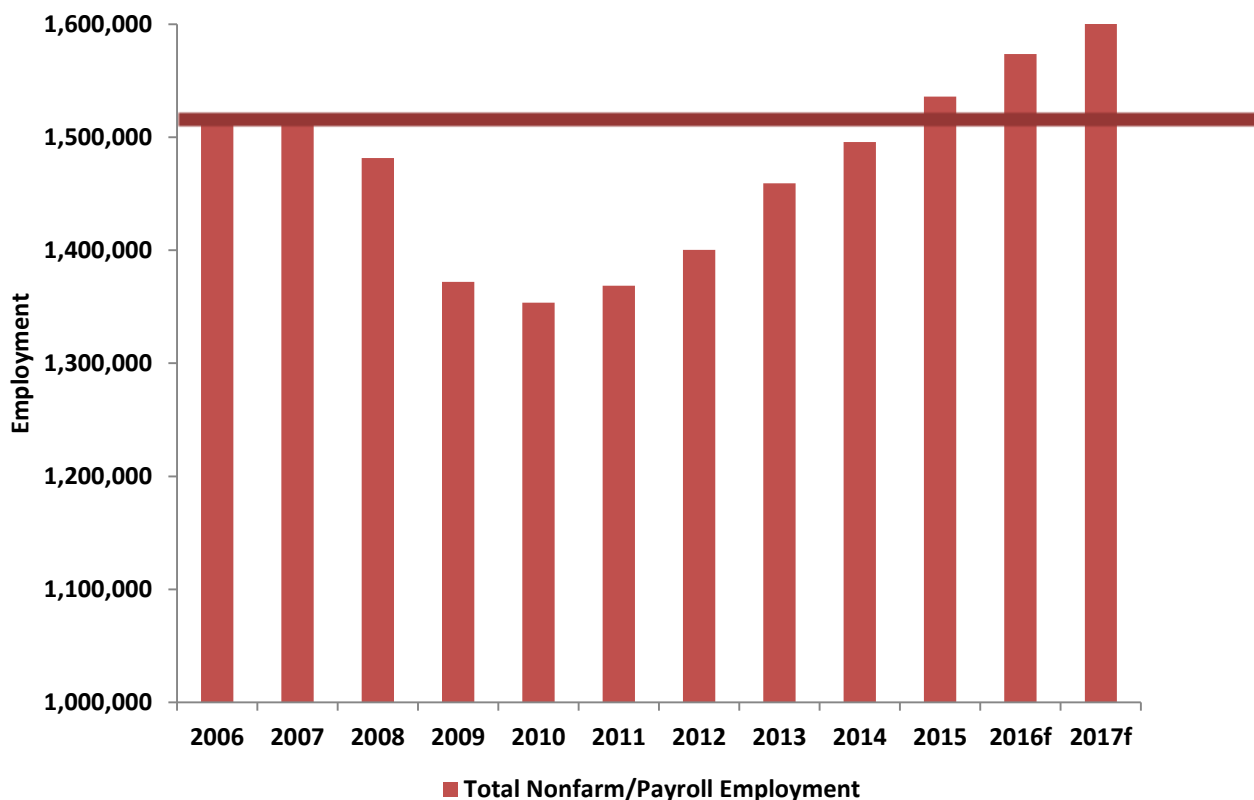
Source: California State University Fullerton Economic Forecast 2016

The table above, Exhibit 2.2, highlights labor force participation rates, by age group, Countywide and nationwide. Additionally, it provides a detailed snapshot of how the labor force has been affected by the recession. While the County's labor force participation rate dropped from 66.8 percent to 65.8 percent between 2007 and 2014, it remained 2.5 percentage points above the national participation rate measured in 2014. Interestingly,

Orange County's older age groups, namely those between 45 and 74 years of age, have much higher participation rates than the national measures. Considering Orange County was heavily impacted during the recession, this trend could partly reflect the need for older generations to remain in the workforce longer, to regain the wealth lost during the economic downturn. The youngest age group measured those between 16 and 19 years of age, experienced a massive decrease in their participation rates between 2007 and 2014, shrinking by 11.1 percentage points and remain 9.8 percentage points below national measures. As the older generations of Orange County's workforce remain in the labor market while delaying retirement, those in positions below them are limited in their career progression. This significantly limits overall vertical career ladder growth. As a result, many jobs traditionally available to the younger workforce become scarce, forcing these age groups to delay joining the workforce while focusing on increasing their educational attainment.

Additionally, Exhibit 2.2 provides information on the percent of U.S. counties with a lower labor force participation rate than Orange County. In 2014, Orange County had a higher participation rate than 66.6 percent of U.S. counties, primarily lead by those aged 45 and older. Most concerning was the relatively low participation rates from younger age groups. A by-product of the recession and concurrent loss of employment opportunities drove many younger generations to enroll in educational institutions to bolster their qualifications. This, while beneficial, drastically limited entrants into the job market. Another by-product of the recession was the trend for businesses to trim their costs as much as possible in order to increase their overall efficiency and maintain certain levels of productivity. A major strategy employed to accomplish this was to reduce overall employment and services to employees, resulting in the reduction of on-the-job training and mentorship. In turn, businesses could no longer mold employees into their positions and instead they only looked for potential employees who could provide a perfect fit, typically older individuals with years of past experience. Despite increasing levels of education, many younger potential employees were passed up for older individuals with past experience, resulting in significant underemployment or unemployment for younger generations.

Exhibit 2.3 O.C. Employment Forecast: Total Nonfarm Employment



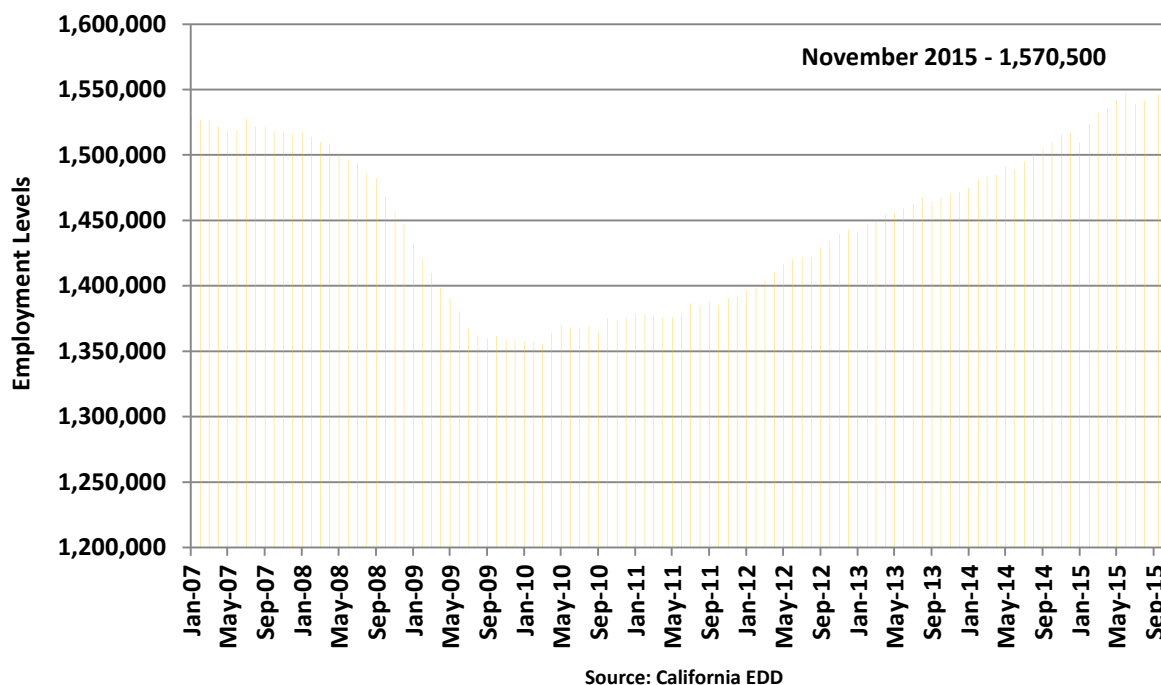
Source: OCBC Analysis of CSUF Economic Forecast 2016

Falling in line with CSUF's previous forecast, Orange County was able to surpass pre-recessionary payroll employment levels about half-way through 2015. This record of nonfarm employment was made possible due to the rapid growth of Orange County's most dominant industries. Expected future growth from these industries will continue to push positive employment growth well into 2016 and 2017. While emphasis should be placed on these dominant industries to ensure they continue to grow and drive economic activity, more focus should be placed on those industries which have not yet reached their pre-recessionary levels. Struggling industries such as Information and Financial Activities, which supply high-wage occupations and provide significant multiplier effects in the County, should not be ignored. Instead, a concerted effort should be put forth to find the best strategies on how to cultivate an environment which allows these industries to grow as rapidly as possible. In doing so, payroll employment in Orange County can expand much more rapidly while increasing the number of occupations with significantly higher-than-average salaries. This could in turn help address home affordability issues currently plaguing certain parts of the County as well.

Orange County Overview

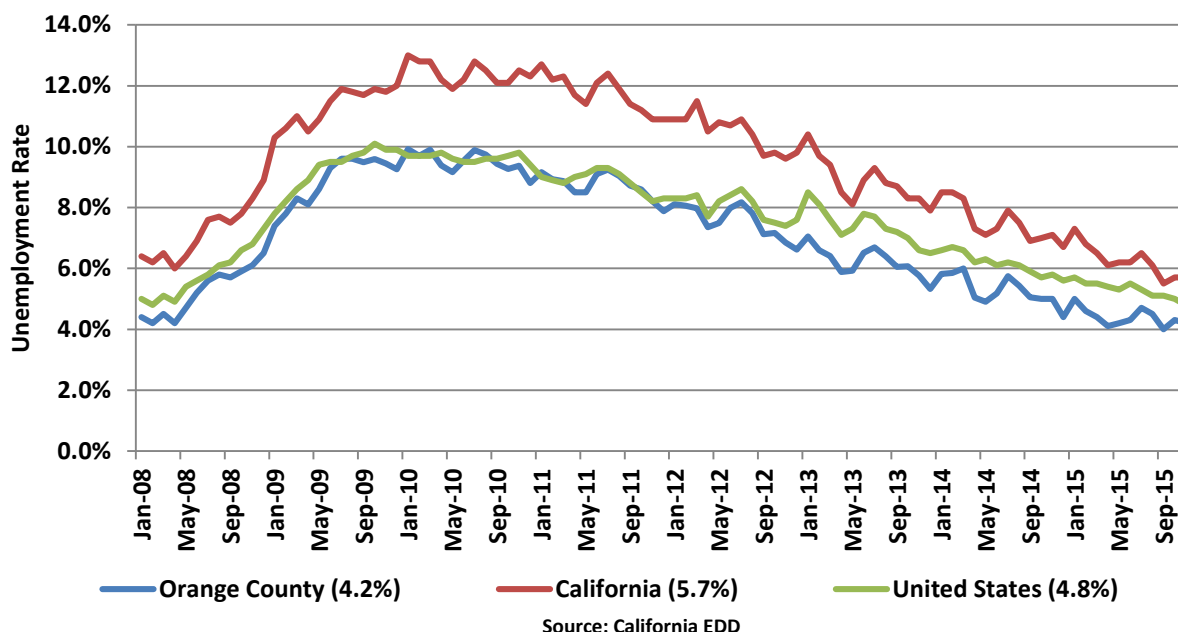
According to the California Employment Development Department (EDD), in 2015 Orange County surpassed its pre-recessionary levels of seasonally adjusted nonfarm employment a remarkable achievement. Exhibit 3.1 shows that seasonally adjusted nonfarm employment amounted to just over 1.57 million in November 2015, 52,500 jobs over October 2007's employment totals. Strong employment growth was seen in 2014, with seasonally adjusted nonfarm employment growing by an average of 3,700 jobs per month or by 44,800 jobs during the whole year. While slightly decreasing at first, this growth has accelerated in late 2015 with average monthly nonfarm employment growth totaling over 4,800 per month or 53,600 year-to-date.

Exhibit 3.1 O.C. Nonfarm Employment



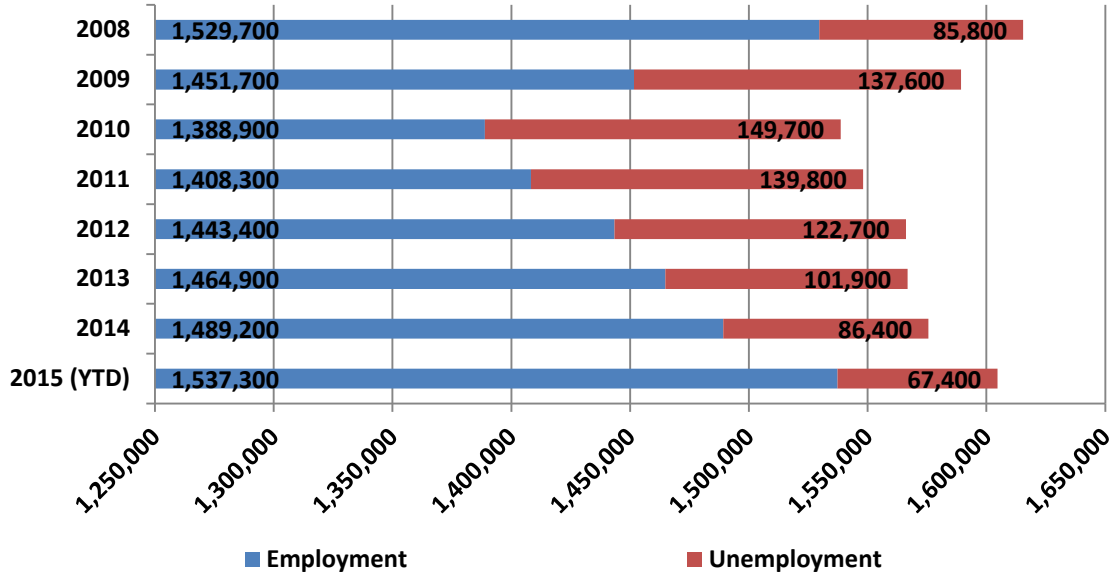
Historically, Orange County has enjoyed comparatively lower unemployment rates relative to regional, state and national averages; a trend which continues to hold in 2015. While Orange County's unemployment rate tracked the national unemployment rate during the recessionary years, since 2013, Orange County has been able to lower its unemployment rate faster than the national averages, highlighting the recent economic growth in the County. Exhibit 3.2 provides further information regarding these unemployment rate trends and shows that by November 2015 Orange County's unemployment rate decreased to 4.2% while the state and national unemployment rate stood at 5.7% and 5.0%, respectively.

Exhibit 3.2 Unemployment Rates (January 2008 – November 2015)



The Great Recession effected Orange County’s economy in a number of ways. In addition to detrimentally impacting the unemployment rate, it also significantly impacted the labor force participation rate. The added difficulty of finding gainful employment opportunities contributed to increased levels of underemployment, discouraged workers, and long-term unemployment. In order to increase potential employment opportunities, many individuals postponed their professional careers and re-enrolled in educational institutions or certification programs. Exhibit 3.3 showcases the number of employed and unemployed individuals in Orange County from 2008 to 2015. During this timeline, the impact of the Great Recession is even more apparent with the number of employed individuals dropping from 1.53 million in 2008 to 1.39 million in 2010, while the number of unemployed individuals simultaneously increased from 85,800 to 149,700. In 2015, the number of employed individuals totaled 1,537,300 in November, surpassing 2008 levels by 7,600 jobs, while the number of unemployed individuals dropped to 67,400, lower than 2008 levels by 18,400.

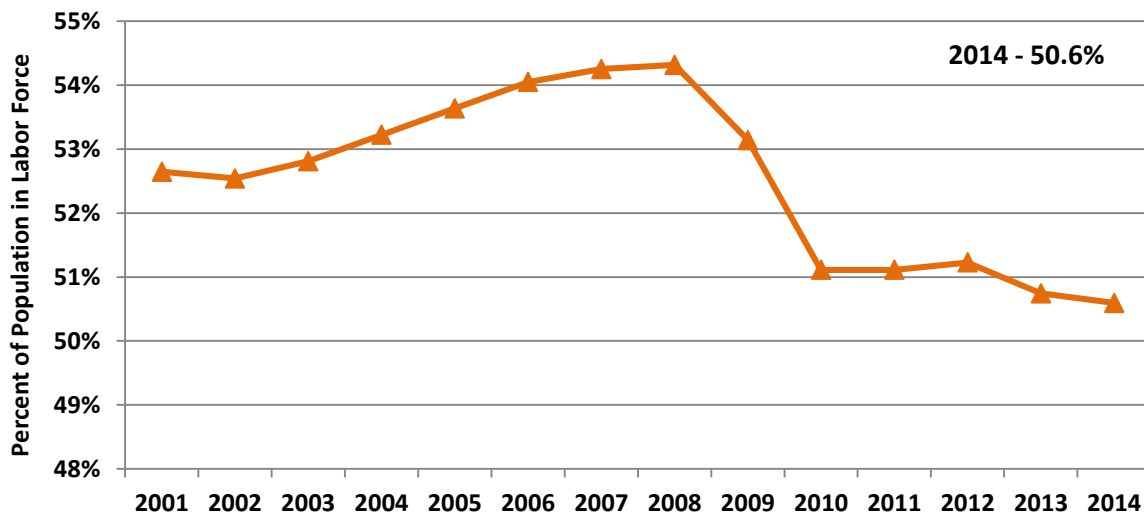
Exhibit 3.3 O.C. Labor Force (2008-2015)



Source: California EDD

Despite the increase in overall health of the job market post-recession, the labor force participation rate continues to decline, reaching its lowest levels in over a decade. This trend suggests a significant insight when analyzing the unemployment rate, as the rate can decline due to increased levels of employment as well as decreased levels of labor force participation. The labor force participation rate experienced its initial decline in 2009, dropping from 54.3% in 2008 to 53.1% in 2009, and continued to further decrease before reaching 50.6% in 2014.

Exhibit 3.4 Labor Force Participation Rate

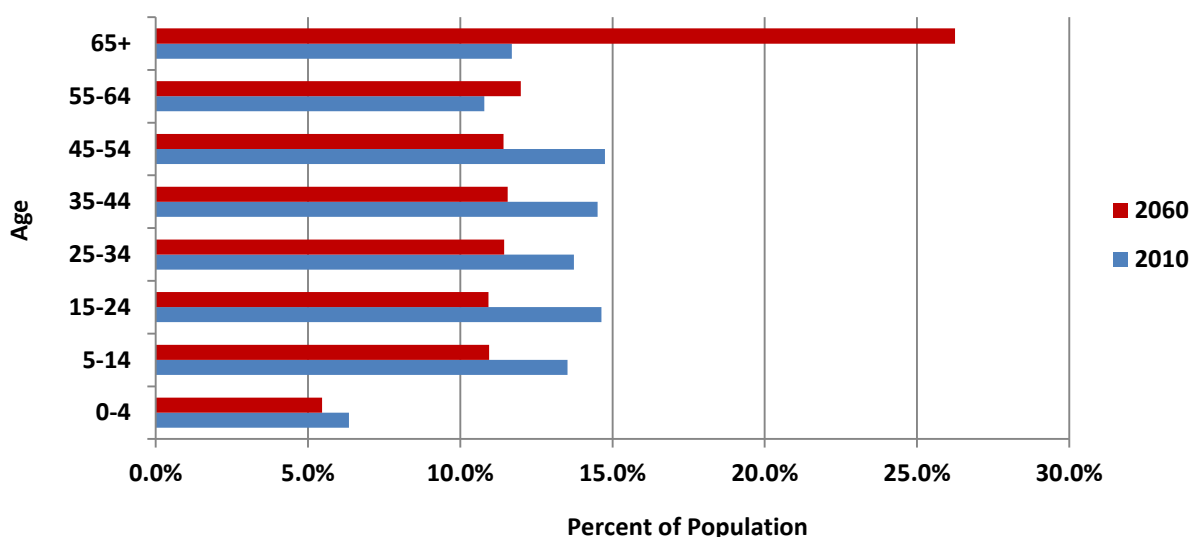


Source: California EDD, California Dept. of Finance

Demographics

Orange County's population is expected to shift dramatically in the future. Following the national trend, the County's population is likely to be comprised of older residents outside of the working age. As evidenced by Exhibit 3.5, residents will see a large rise in the proportion of individuals aged 65 years and older, while simultaneously seeing a sizeable drop in the proportion of individuals aged 54 and younger. This shift in demographics is likely to have disruptive effects on the County's economy as the number of working age adults will decrease significantly.

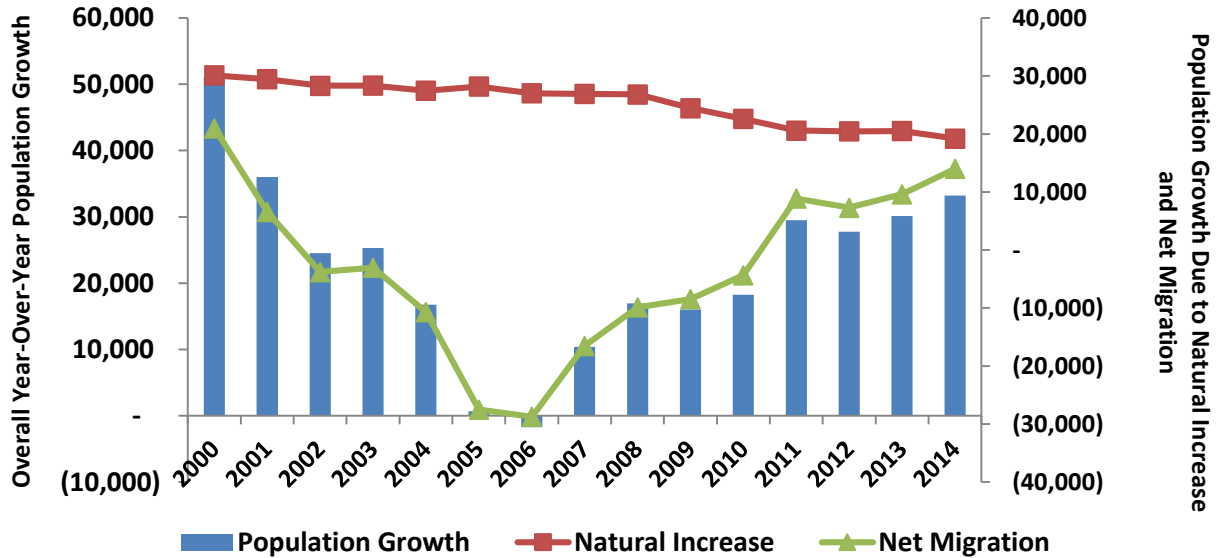
Exhibit 3.5 Projected Components of Population by Age in O.C. (2010-2060)



Source: California Department of Finance

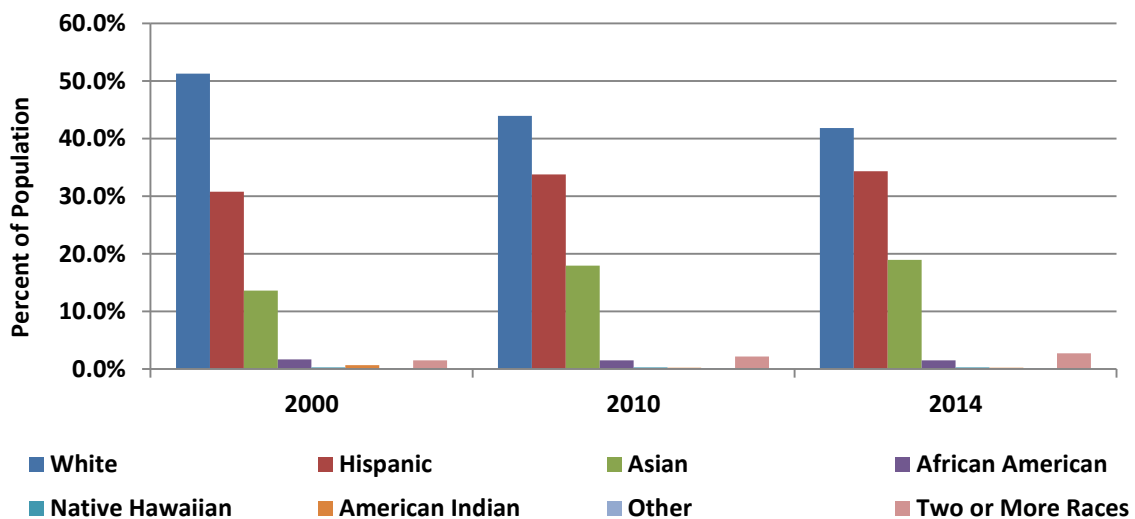
Historically, Orange County's population growth has been mainly attributable to immigration into the region, though over the past decade the County's population growth has been primarily driven by natural increase (births minus deaths), which has added over 375,000 people to the County's population since the year 2000. While immigration into the County has increased the population by approximately 211,216 people since 2000, net domestic migration has decreased by approximately 260,000 people, resulting in an overall negative net migration of 48,651. A major factor which has impacted overall population growth for the County was the Great Recession, which has seemingly reduced immigration and increased migration. Yet, this recessionary period had minimal impacts on the natural increase, which averaged over 25,000 per year between 2000 and 2014.

Exhibit 3.6 O.C. Population Growth (2000-2014)



In addition to the changing age related trends in Orange County, the ethnic composition of the area is also evolving, creating a more varied and diverse population. Exhibit 3.7 provides a snapshot of the evolution of Orange County’s ethnic groups. In 2000, Whites made up over 50 percent of the population which has since dropped to just over 40 percent as of 2014, while those of Latino or Hispanic heritage have increased from just over 30 percent to 34 percent for the same time period. Additionally, the percent of Asians in the Orange County community has been increasing, going from 13.6 percent in 2000 to just fewer than 20 percent in 2014.

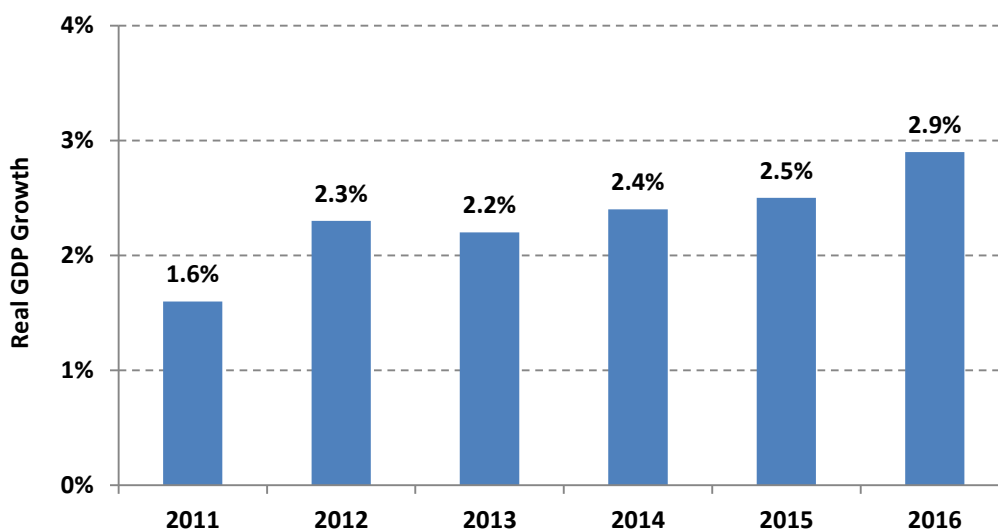
Exhibit 3.7 O.C. Ethnic Population (2000-2014)



Economic Activity

According to a research study conducted by Chapman University, real GDP growth is expected to remain positive through 2015 at 2.5 percent and increase further to 2.9 percent in 2016. With the exception of 2016, CSUF's estimates of percent change in real GDP growth fall closely in line with Chapman's estimates with real GDP growth of 2.4 percent expected in 2014, 2.4 percent in 2015 and 2.6 percent in 2016. Exhibit 3.8 below highlights Chapman University's GDP forecast for Orange County.

Exhibit 3.8 Chapman University: O.C. Real GDP, Annual Percent Change



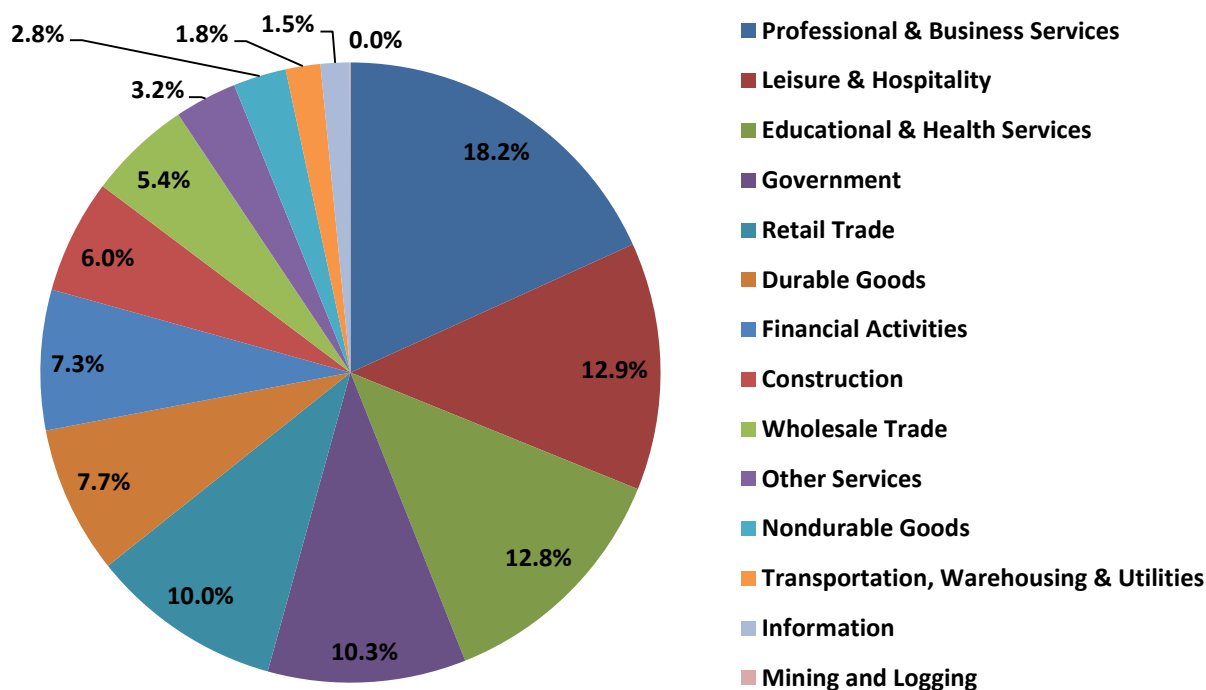
Source: Chapman University Economic Forecast 2015 Midyear Update

Overall, Orange County's economy is very close to regaining its pre-recessionary strength. Unemployment rates continue to fall drastically and have recently surpassed pre-recession averages, travel and trade volumes are on the rise year-over-year boosting the County's Leisure and Tourism industries as well as generating significant revenue, and recent reports, while not as optimistic as they were at the beginning of the year, still indicate continued expansion of manufacturing operations. The next section provides a deeper look into the industries and occupations that account for Orange County's strengths and recent growth, indicating the true status of Orange County's post-recession economic status. This information is gathered from numerous sources in order to provide the most comprehensive snapshot.

Key Existing and Emerging Industries

According to the most recent data available from the California EDD, Professional & Business Services, Educational & Health Services, and Leisure & Hospitality continue to be Orange County's largest employment industries. Over the past year, the largest percentage growth of employment was seen in Construction (+9.6%), Other Services (+4.7%), and Leisure and Hospitality (+4.2%). The largest absolute decline in employment over the year came from the Finance industry which dropped by 1,100 jobs (-0.9%), followed by the Information industry which shrank by 200 jobs (-0.8%) and Mining and Logging which shrank by 100 jobs (-14.3%). As shown by Exhibit 4.1, Professional and Business Services, Leisure & Hospitality, and Educational & Health Services were the highest employing industries, representing 18.2 percent, 12.9 percent, and 12.8 percent of total nonfarm employment in Orange County as of November 2015, respectively.

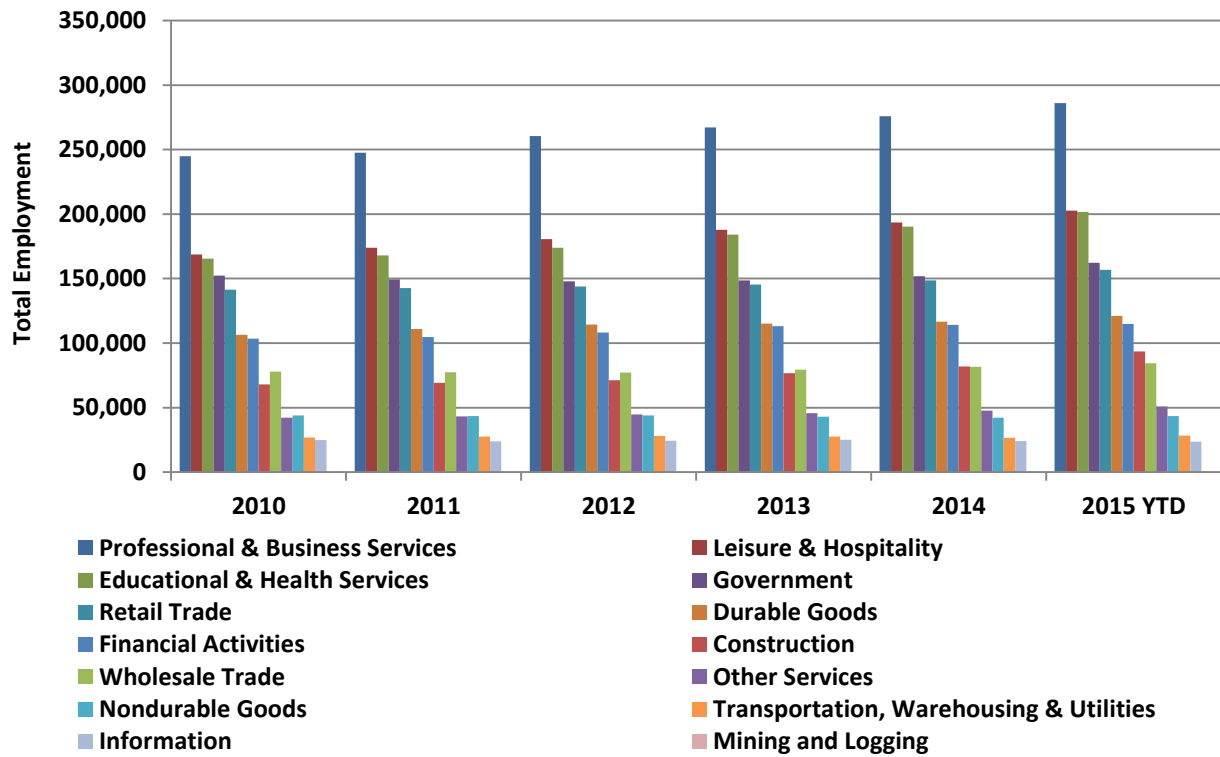
Exhibit 4.1 O.C. Industry Employment Breakdown (November 2015)



Source: California EDD

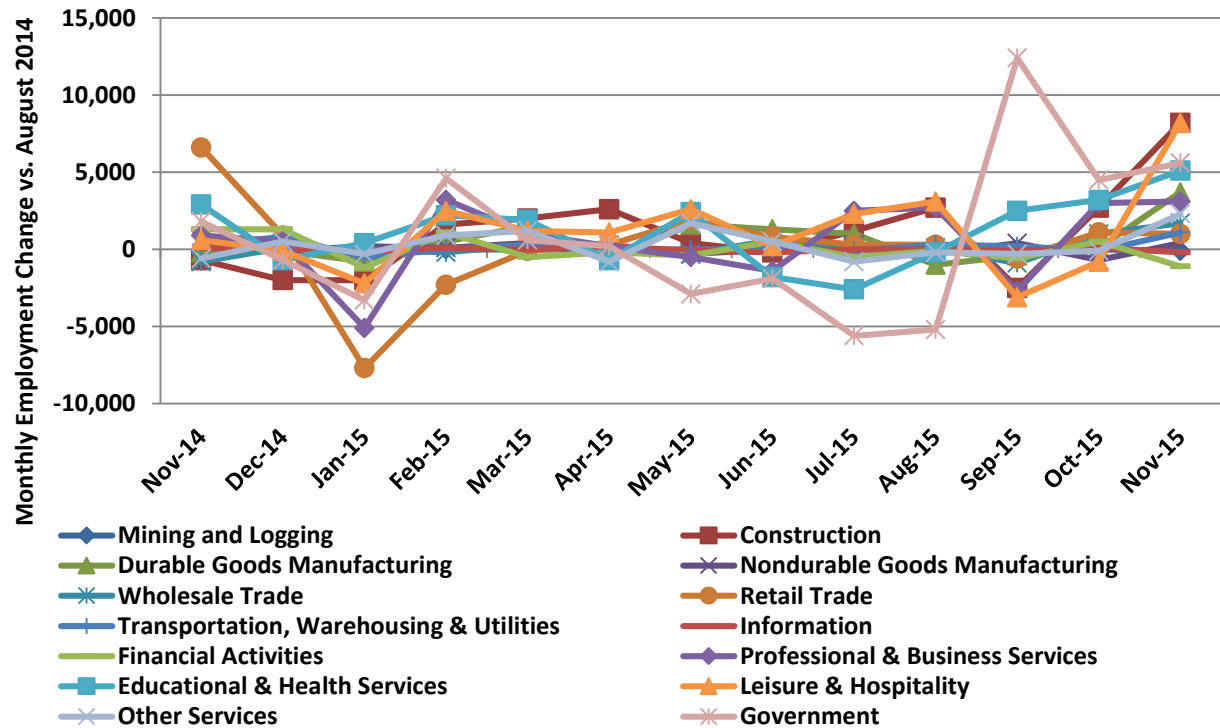
Exhibit 4.2 provides a five-year overview of employment trends by industry in Orange County, while Exhibit 4.3 communicates the monthly fluctuations experienced by each primary industry over the past 12 months. Retail Trade, and Government industries showed the largest fluctuations in employment, most likely due to seasonality associated with those industries, though both segments ended with positive employment growth compared to the prior year.

Exhibit 4.2 O.C. Annual Industry Trends (2010-2015)



Source: California EDD

Exhibit 4.3 O.C. Industry Employment Change Comparison (Nov-14 to Nov-15)



Source: California EDD

In order to provide the most comprehensive assessment of Orange County's job market, Exhibit 4.4 provides details of the County's employment growth, comparing employment rate at the start of the Great Recession (October 2007), to the previous year (November 2014) as well as the previous month (October 2015). In comparison to October 2007, most of Orange County's industries have not yet regained their pre-recession employment levels, with the largest decrease in employment coming from Non-Durable Goods Manufacturing (-10,200 jobs) followed by declines in Construction (-9,100 jobs) and Information (-7,100 jobs).

Of the few industries which have surpassed their pre-recession employment totals, Educational and Health Services represented the highest absolute job growth with 50,500 plus jobs, followed by Leisure & Hospitality with 27,400 plus jobs, and Professional and Business Services with 9,500 plus jobs. Over the past year, the largest absolute gain in employment stems from the Construction and Leisure and Hospitality industries which both increased by 8,200 plus jobs or expanded by 9.6 percent and 4.2 percent, respectively. While non-seasonally adjusted employment in many Orange County industries remains below levels measured in October 2007, the strong improvement of the job market is made apparent by the 1.0% decline in the unemployment rate compared to the year before, as well as the unemployment rate nearing October 2007 levels.

Exhibit 4.4 Industry Employment Change

Industry Employment Change		Vs. October 2015		Vs. November 2014		Vs. October 2007	
Industry	November 2015	Actual Change	Percent Change	Actual Change	Percent Change	Actual Change	Percent Change
Civilian Labor Force	1,604,700	-200	-0.01%	12,100	0.76%	-5,700	-0.35%
Civilian Employment	1,537,300	1,400	0.09%	27,300	1.81%	-6,700	-0.43%
Civilian Unemployment	67,400	-1,600	-2.32%	-15,200	-18.40%	1,000	1.51%
Total, All Industries	1,573,000	11,400	0.73%	39,000	2.54%	43,400	2.84%
Total Nonfarm	1,570,500	11,600	0.74%	39,000	2.55%	46,000	3.02%
Mining and Logging	600	-100	-14.29%	-100	-14.29%	0	0.00%
Construction	93,500	1,300	1.41%	8,200	9.61%	-9,100	-8.87%
Durable Goods Manufacturing	121,100	700	0.58%	3,700	3.15%	-4,200	-3.35%
Nondurable Goods Manufacturing	43,400	200	0.46%	400	0.93%	-10,200	-19.03%
Wholesale Trade	84,300	300	0.36%	1,700	2.06%	-3,300	-3.77%
Retail Trade	156,900	6,100	4.05%	1,000	0.64%	-4,400	-2.73%
Transportation, Warehousing & Utilities	28,400	400	1.43%	1,100	4.03%	-1,100	-3.73%
Information	23,700	-100	-0.42%	-200	-0.84%	-7,100	-23.05%
Financial Activities	114,800	0	0.00%	-1,100	-0.95%	-6,300	-5.20%
Professional & Business Services	286,100	500	0.18%	3,100	1.10%	9,500	3.43%
Educational & Health Services	201,600	-1,300	-0.64%	5,100	2.60%	50,500	33.42%
Leisure & Hospitality	202,800	1,100	0.55%	8,200	4.21%	27,400	15.62%
Other Services	51,000	-300	-0.58%	2,300	4.72%	3,100	6.47%
Government	162,300	2,800	1.76%	5,600	3.57%	1,200	0.74%
Civilian Unemployment Rate	4.20%	-0.10%		-1.00%		0.10%	

Source: California EDD

Exhibit 4.5 provides a snapshot of the evolution of industry wages and indicates that overall wage levels for all industries in Orange County have increased by 22 percent since 2007 and 9.9 percent since last year. Professional and Technical Services, Information, and Management industries registered the largest salary increases since 2007 at 86.5 percent, 34.9 percent, and 30.3 percent, respectively. On a year-over-year basis, Arts, Entertainment and Recreation, Management, and Manufacturing industries all saw marginal increases, while the Professional and Technical Service industry experienced a significant increase by \$45,916 or 51.8 percent.

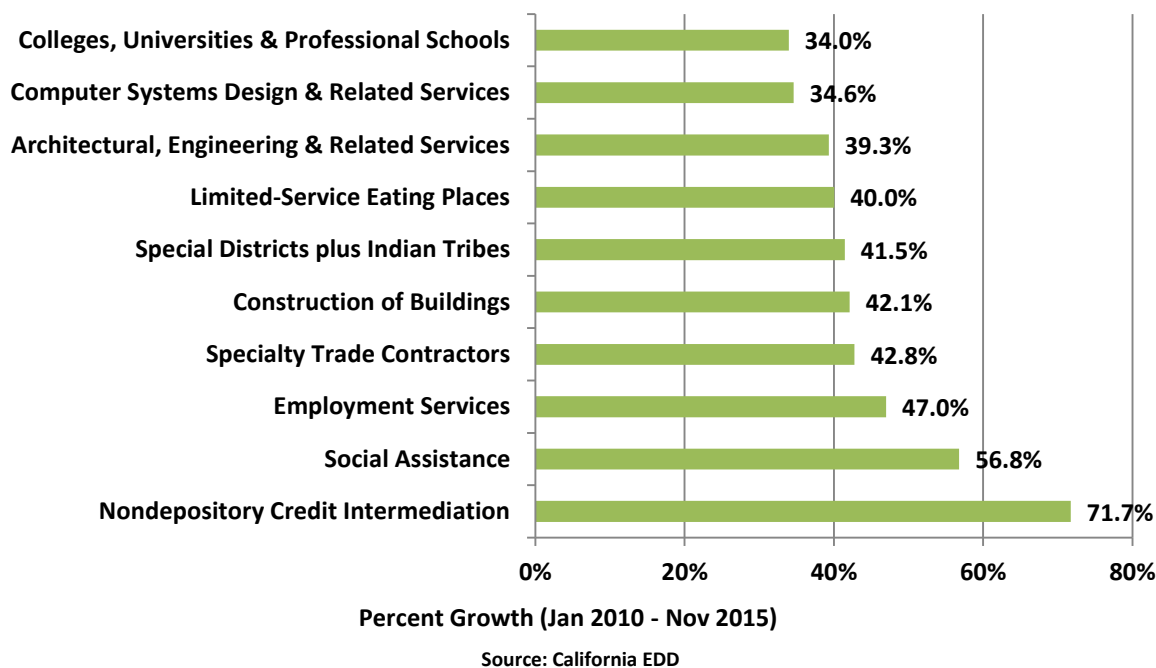
Exhibit 4.5 Industry Salary Change

Industry Salary Change		Vs. Q1 2014		Vs. Q1 2007	
Industry	Q1 2015	Actual Change	Percent Change	Actual Change	Percent Change
Total, All Industries	\$62,868	\$5,668	9.9%	\$11,336	22.0%
Agriculture, Forestry, Fishing & Hunting	\$28,860	\$4,940	20.7%	\$4,368	17.8%
Construction	\$61,880	\$1,248	2.1%	\$6,084	10.9%
Manufacturing	\$73,996	-\$156	-0.2%	\$13,884	23.1%
Wholesale Trade	\$88,088	\$8,164	10.2%	\$13,624	18.3%
Retail Trade	\$34,216	\$1,092	3.3%	\$936	2.8%
Transportation and Warehousing	\$50,908	\$2,652	5.5%	\$8,216	19.2%
Information	\$99,892	\$5,772	6.1%	\$25,844	34.9%
Finance and Insurance	\$113,776	\$5,096	4.7%	\$17,004	17.6%
Real Estate and Rental and Leasing	\$75,192	\$6,188	8.9%	\$15,652	26.3%
Professional and Technical Services	\$134,628	\$45,916	51.8%	\$62,452	86.5%
Management of Companies and Enterprises	\$116,532	-\$1,976	-1.7%	\$27,092	30.3%
Administrative and Waste Services	\$38,948	\$728	1.9%	\$6,448	19.8%
Educational Services	\$36,400	\$156	0.4%	\$3,120	9.4%
Health Care and Social Assistance	\$47,320	\$1,144	2.5%	\$1,508	3.3%
Arts, Entertainment, and Recreation	\$30,212	-\$520	-1.7%	\$3,848	14.6%
Accommodation and Food Services	\$22,100	\$1,612	7.9%	\$3,016	15.8%
Other Services, Ex. Public Admin	\$34,164	\$1,092	3.3%	\$5,148	17.7%

Source: California EDD

Exploring further into more specific sub-industry groups, Exhibit 4.6 highlights the fastest growing industries in the County since January 2010. The largest growth was seen in Non-depository Credit Intermediation at 71.7 percent, Social Assistance at 56.8 percent and Employment Services at 47.0 percent. These rapidly-growing industries are positively correlated with the sizable employment pools of the largest three 2-digit NAICS-classified industries in Orange County. A prominent indicator of continued recovery in the County is the resurgence of construction employment which has been, so far, supported by the growth Specialty Trade Contractors which grew by 42.8 percent since January 2010, and the Construction of buildings which grew by 42.1 percent during the same time period. Construction employment serves as a great barometer for the overall health of the ongoing recovery as it indicates that land development is expanding, a pre-cursor to increased future economic activity for the region.

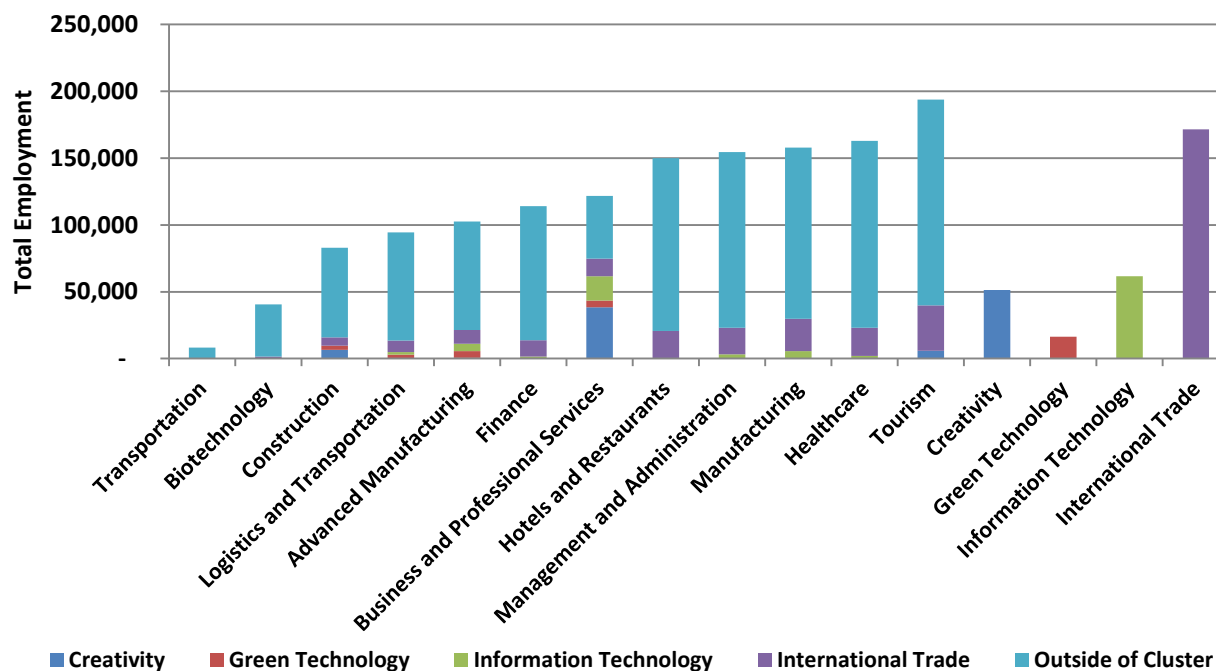
Exhibit 4.6 Top Ten Fastest Growing Industries in O.C. by Percent Growth



A multitude of geographic and economic competitive advantages present in Orange County have created a unique market landscape which has led to the emergence of four important industries that cross traditional industry clusters. These cross-cutting industries include International Trade, Information Technology, Creativity, and Green Technology. The evolution of these industries has turned them into industry drivers, helping to boost employment in the County's traditional employment sectors, while providing a clear assessment of the major trends, opportunities, and shortfalls currently impacting Orange County. By understanding these drivers and their potential impacts on the current market landscape, more comprehensive and effective policies can be crafted to support these growth industries, which then translate to growth in more traditional industries as well.

The graph below, Exhibit 4.7, provides a snapshot of these four cross-cutting industries and their impacts on the 12 primary industries in Orange County, as well as the total employment within those industry drivers. These industry drivers represented approximately 280,000 jobs over 12 different industry clusters in 2014. These industry levels not only work to boost employment levels in traditional industries, they also provide higher than average salaries, specifically they provide \$22,000 above the Orange County average wage. Despite the pervasiveness of International Trade in each traditional industry, Creativity and Information Technology drivers had sizeable impacts on one of Orange County's most important sectors, Business and Professional Services.

Exhibit 4.7 O.C. Cluster Drivers (2014)



Source: OCBC Analysis of California EDD Data, OTIS Report, Next10, and LAEDC

International Trade is a strong industry driver in Orange County as a result of the region's proximity to the ports located in Los Angeles and Long Beach, proximity to international and domestic airports including LAX and John Wayne Airport, well-connected freeways and road systems, rail lines providing national linkages, and an increasingly well-educated, multi-cultural workforce. As estimated by California State University Fullerton (CSUF), Mexico and Canada remain as Orange County's largest trade partners and are projected to account for over \$7.1 billion and \$3.4 billion in trade in 2015, respectively. The remaining major trade partners include China, Japan, and South Korea, which together are projected to account for 23.2 percent of exports in 2015 valued at \$6.5 billion.

Orange County's largest export sectors continue to include Computer & Electronic Products, and Transportation Equipment; in 2015 these sectors are expected to provide \$8.5 billion and \$5.0 billion in export value, respectively. These two sectors alone are expected to represent approximately 48 percent of total exports in 2015. Total export volume was measured at \$23.9 billion in 2012 and CSUF expects volume to grow by 3.1 percent to \$24.7 billion in 2013, by 5.7 percent to \$26.2 billion in 2014, and by 7.6 percent to \$28.1 billion in 2015.

Exhibit 4.8 O.C. Exports by Country (2006-2015) Forecast

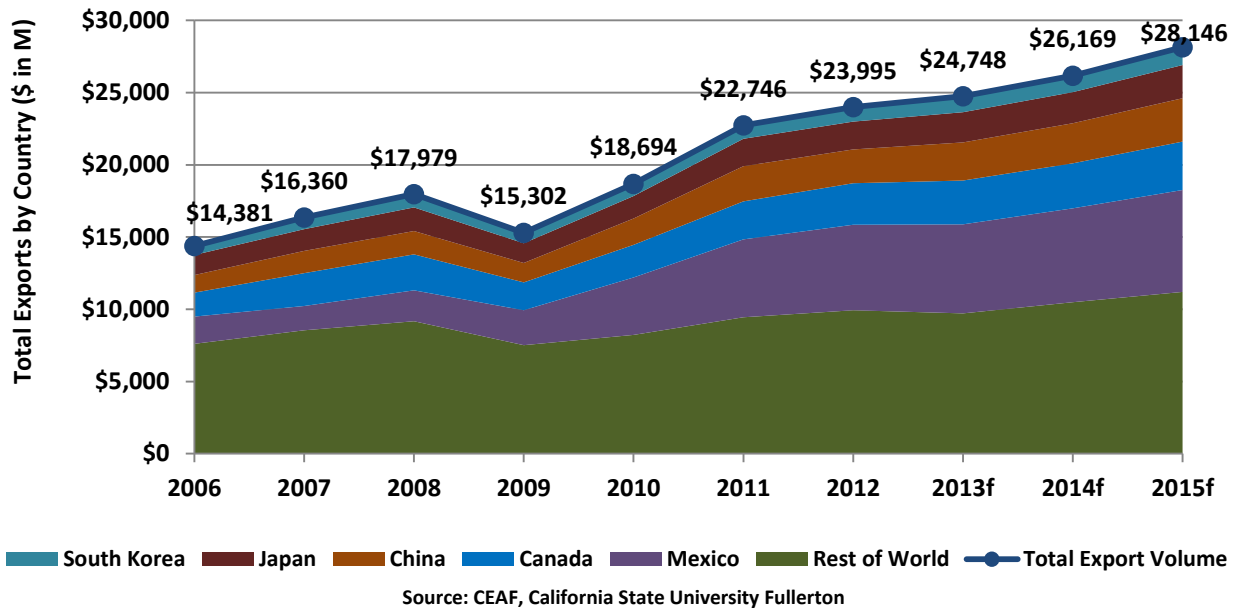
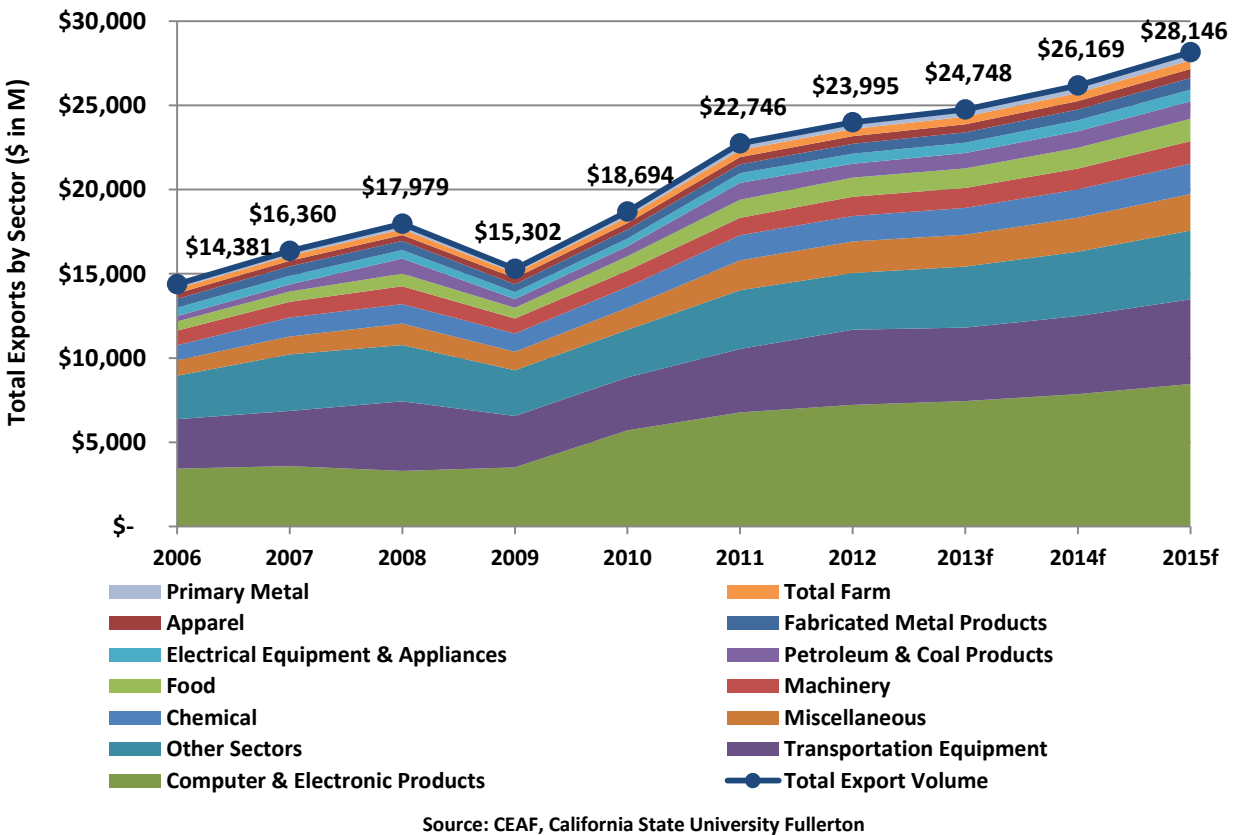
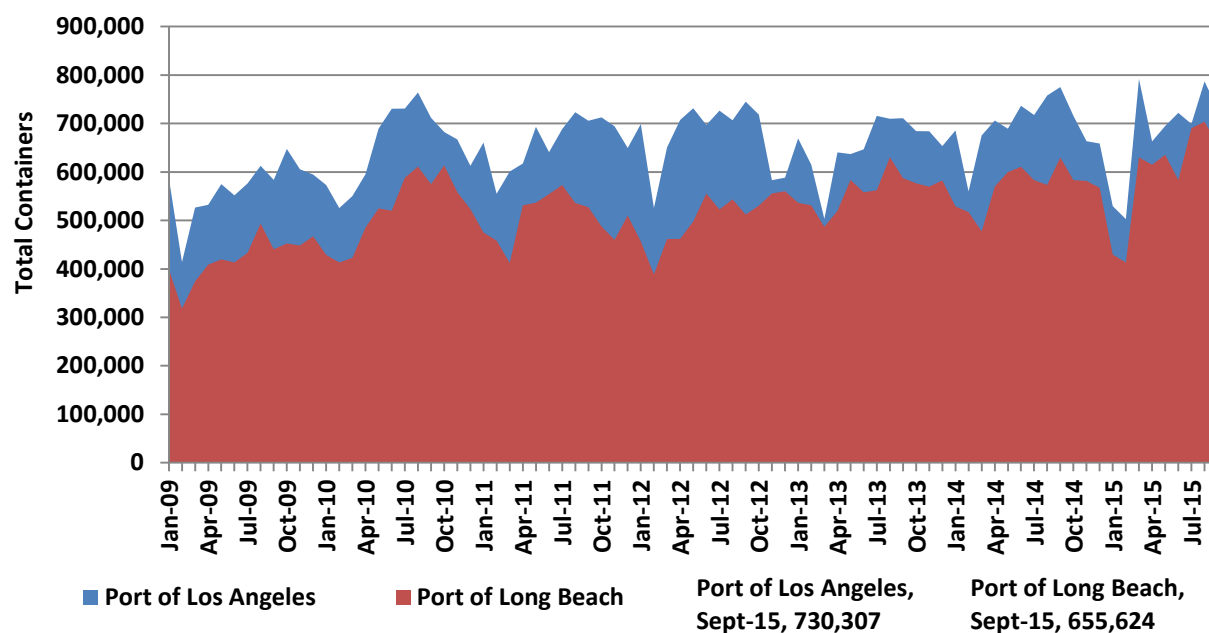


Exhibit 4.9 O.C. Exports by Sector (2006-2015) Forecast



Coinciding with the increasing export volume, shipping container activity from the Port of Los Angeles and the Port of Long Beach, shown in Exhibit 4.10, has been relatively strong and reached 6-year highs in 2015. Shipping container activity through the Port of Los Angeles reached its 6-year high in March, 2015, while shipping container activity through the Port of Long Beach reached 6-year highs in August, 2015.

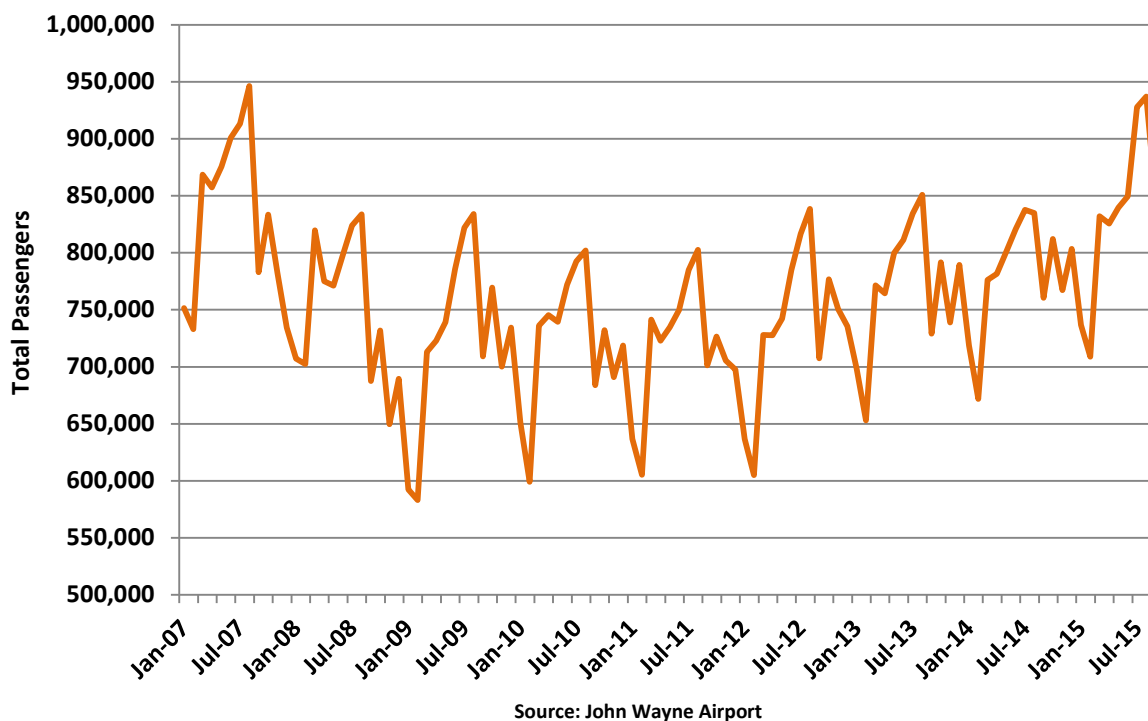
Exhibit 4.10 Ports of Long Beach & Los Angeles Total Container Activity (2009-2015)



Source: Port of Long Beach, Port of Los Angeles

As a result of Orange County's picturesque 42-mile coastline, world renowned theme parks, and top-tier shopping centers, tourism play a large part in driving economic activity and prosperity within Orange County. Serving as the County's primary airport, John Wayne – Santa Ana Airport (SNA) registered 844,385 total passengers during the month of September, 2015, a much higher passenger count than previously noted in 2008, though below the nearly 950,000 total passengers measured in August 2007. Despite a recovery in monthly total passengers, total air cargo and total air operations have failed to materialize to pre-recessionary activity levels. As indicated by the Orange County Visitor Association, in 2014, Orange County saw an estimated 46 million visitors, an increase of 3.6 percent over 2013 levels and a new record for the County. However, it was noted that total visitor spending increased dramatically by 11.2 percent to \$10.7 billion in 2014. As the economy continues its recovery and consumer spending continued to approach pre-recessionary levels, tourism and total visitor spending is expected to increase.

Exhibit 4.11 John Wayne Airport (SNA) (2007-2015) Monthly Total Passengers



As technology and innovation continue to evolve and disrupt traditional industries, the importance of Orange County's Information Technology (IT) industry continues to grow. As a major industry driver, the County's IT industry represents an outstanding source with significant employment growth potential. Ensuring that this anticipated growth is properly supported and encouraged will greatly help to attract and retain more high-tech firms and employees. While Orange County has already established itself as a hub for high-tech firms by housing organizations such as Broadcom, Western Digital Corporation, Toshiba America Information Systems and Conexant Systems, the rapid evolution of technology requires great flexibility and ensuring the County remains competitive and ahead of these trends will be critical to future prosperity.

According to the California Employment Development Department, the average annual wage for the Information industry was \$99,889 during the first quarter of 2015, nearly \$30,000 more than the average salary within all industries in the County. Additionally, the state's top-earning occupations in Information Technology include Information Systems Managers (\$143,791 annual salary), Information Research Scientists (\$122,832 annual salary), and Computer Hardware Engineers (\$121,960 annual salary).

Another important industry driver in Orange County has been the Creativity sector. The Creativity segment, while primarily referring to cultural, artistic, or design occupations,

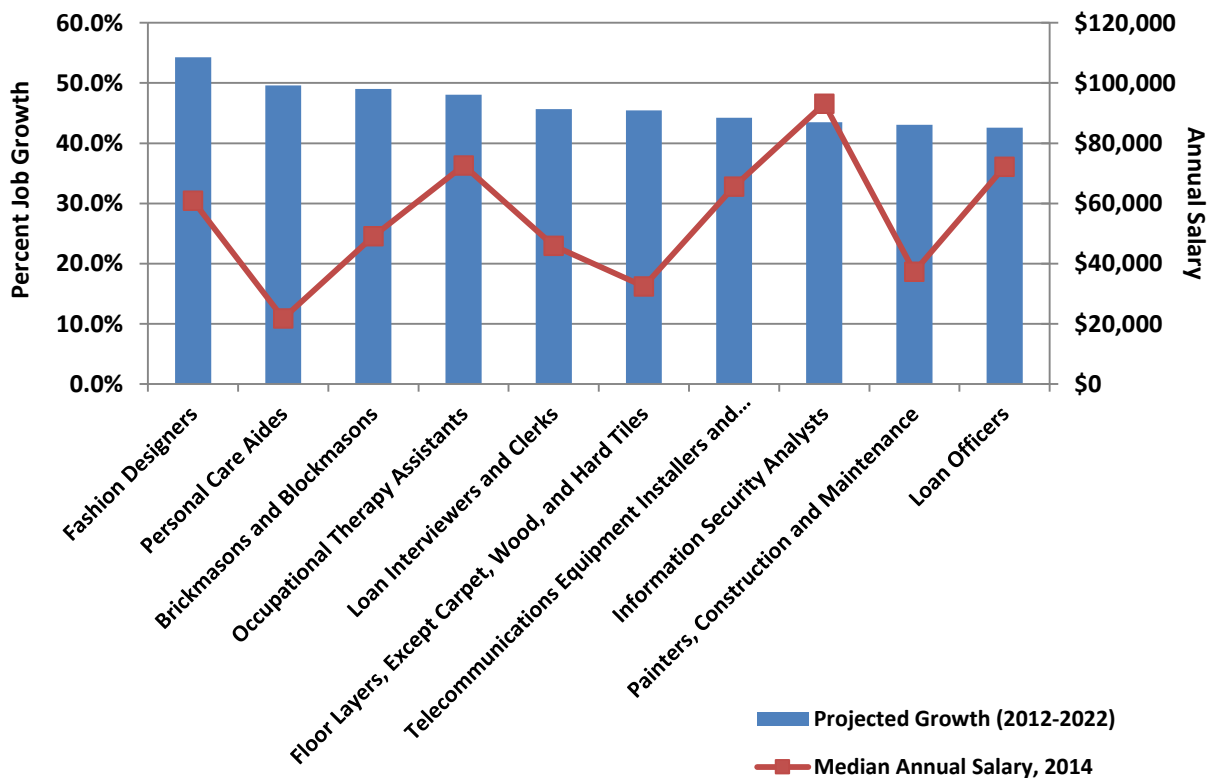
encompasses a variety of different sectors including Entertainment, Digital Media, Printing & Publishing, Architecture, Visual & Performing Arts, and Toy manufacturing. Of the measured 51,300 jobs in the Creativity industry, approximately 38,400 are derived from the Business and Professional Services sector. While the Creativity industry does provide a sizeable, direct contribution to employment levels in Orange County, it is also important to consider the direct, indirect, and induced contributions as well. The total direct, indirect, and induced employment associated with the creative industry was 82,700 in 2013, which provided \$4.9 billion in labor income and \$631 million in taxes for Orange County. The average annual salaries provided by the Creative industry vary just as much as the occupations contained within this industry, indicating the availability of employment opportunities at many different levels within this industry.

An emerging industry which is becoming more prominent both regionally and nationally is Green Technology. Green technology refers to industries comprised of firms focused on creating environmentally conscious products and services that aim to increase efficiency and minimize costs. While Green technology has a presence in a number of industries, it is most prevalent in Business & Professional Services, Manufacturing, and Advanced Manufacturing. Additionally, Orange County has fostered a great landscape for a variety of Green Technology, and Clean Transportation (alternative fuel and vehicle technologies) oriented businesses, resulting in a rapid expansion of these market segments within the region. Further, this growth is also partly due to Orange County's renewed commitment to alternative fuel vehicle infrastructures. Between 2012 and 2013, Orange County recorded a 93 percent increase in zero emission vehicles, totaling to 7,400 vehicle registrations.

Occupational Employment and Salary Growth

As shown in Exhibit 5.1, the fastest growing occupations in Orange County are primarily concentrated in Healthcare, Construction, and Information Technology. Healthcare and Construction industries have added a significant number of jobs to the County's economy, while the Information Technology industry is integral to the region's economy due to its high potential for future growth. Of notable importance, Fashion Design, which is part of Orange County's Creative industry, is expected to be the fastest growing occupation over the next decade, increasing by 54.3 percent or by an average of 5.4 percent annually. These occupations provide employment opportunities in different industries and at nearly all skills levels, which is reflected in the wide range of median annual salaries. As such, these occupations may help in closing the middle-skills gap currently plaguing Orange County; yet, it is imperative that those occupations with relatively low salaries are supported by training or educational programs that allow individuals to potentially increase their salaries and climb their respective career ladders.

Exhibit 5.1 Average Salaries of Fastest-Growing Occupations in O.C. (2012-2022)

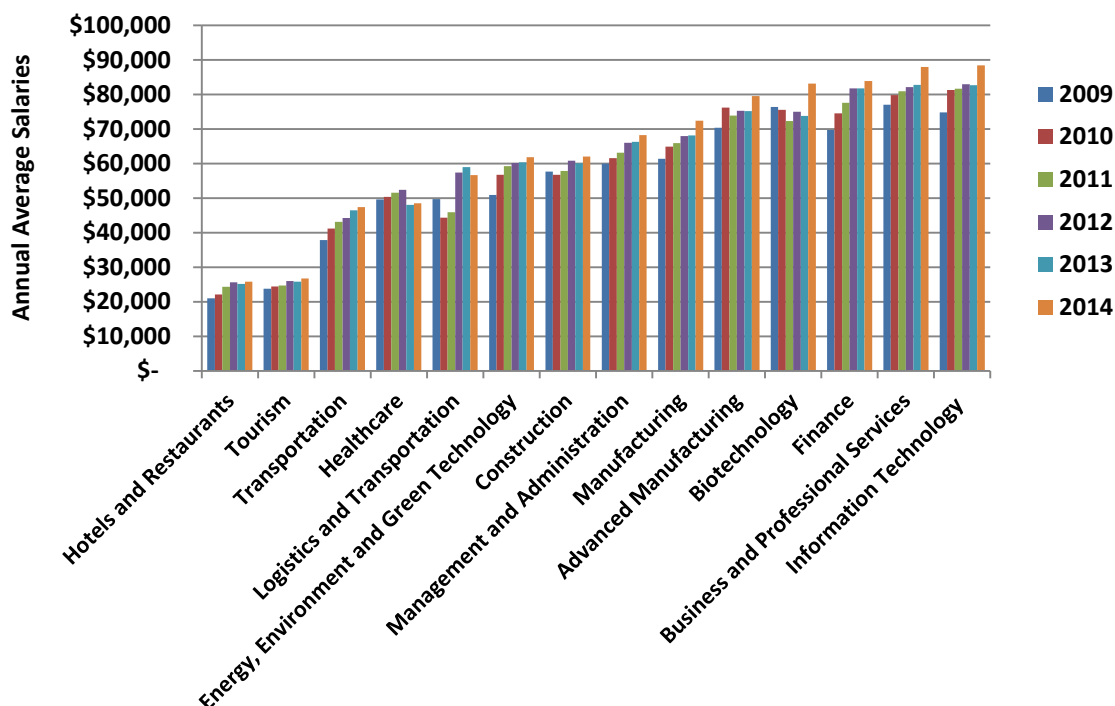


Source: OCBC Analysis of California EDD Data, QCEW Dataset

While the County has continually experienced positive salary growth over the past few years, a few industries actually experienced a contraction in their average salaries. According to Exhibit

5.2, the highest salary growth from 2013 to 2014 was seen in Biotechnology (12.6 percent), Information (7.0 percent), Manufacturing (6.3 percent), and Business and Professional Services (6.2 percent). Comparatively, in 2009, the highest percent growth in salaries came from Transportation (25.2 percent), followed by Hotels and Restaurants (23.1 percent), Energy, Environment and Green Technology (21.4 percent), and Finance (20.3 percent).

Exhibit 5.2 O.C. Cluster Salary (2009-2014)



Source: OCBC Analysis of California EDD Data, QCEW Dataset

In order to provide a comprehensive snapshot of salary scales in Orange County, Exhibit 5.3 shows the results of California EDD's Quarterly Census of Earnings and Wages (QCEW) for the first quarter of 2015 compared to last year's annual average salary and employment levels by major occupation group. Highlights include the general increase in annual wage levels by 1.7 percent since 2014 across all occupations, averaging \$54,023. The largest jump in salary growth on a percentage basis was experienced by Sales and Related Occupations, which increased by 4.3 percent or \$1,897 reaching \$46,565 in Q1 2015. On an absolute basis, the largest salary growth since Q1 2014 included Business and Financial Operations (\$3,121 or 4.1 percent increase), Life, Physical and Social Science (\$2,646 or 3.4 percent increase), and Healthcare Practitioners and Technical Occupations (\$2,579 or 2.9 percent increase).

Despite providing the largest annual salary of any occupational group in Orange County, Management occupations which provided an average annual salary of \$126,128 in Q1 2015,

actually experienced a contraction in its salary levels compared to the previous year, dropping by 1.4 percent or \$1,749. Other occupations that experienced a decrease in their average annual salaries include Protective Services (\$3,070 or a 6.1 percent reduction), Legal occupations (\$2,288 or a 2.1 percent reduction), and Personal Care and Service occupations (\$896 or a 3.3 percent reduction).

Overall, occupational employment has also experienced growth since Q1 2014, expanding from 1,452,430 to 1,484,500, an increase of 32,070 or 2.2 percent. On an absolute basis, this employment growth was primarily driven by Production occupations which grew by 5,990 jobs (5.6 percent growth), Food Preparation and Serving-Related occupations which grew by 5,970 jobs (4.4 percent growth), and Management occupations which grew by 5,370 jobs (5.9 percent growth). On a percentage basis, the occupational groups which experienced the largest growth include Arts, Design, Entertainment, Sports, and Media related occupations which expanded by 11.7 percent or 2,300 jobs, Personal Care and Service occupations which expanded by 10.3 percent or 3,820 jobs, and Protective Service occupations which grew by 8.4 percent or 1,920 jobs.

Exhibit 5.3 Orange County Occupational Wages and Employment (2014 – 2015)

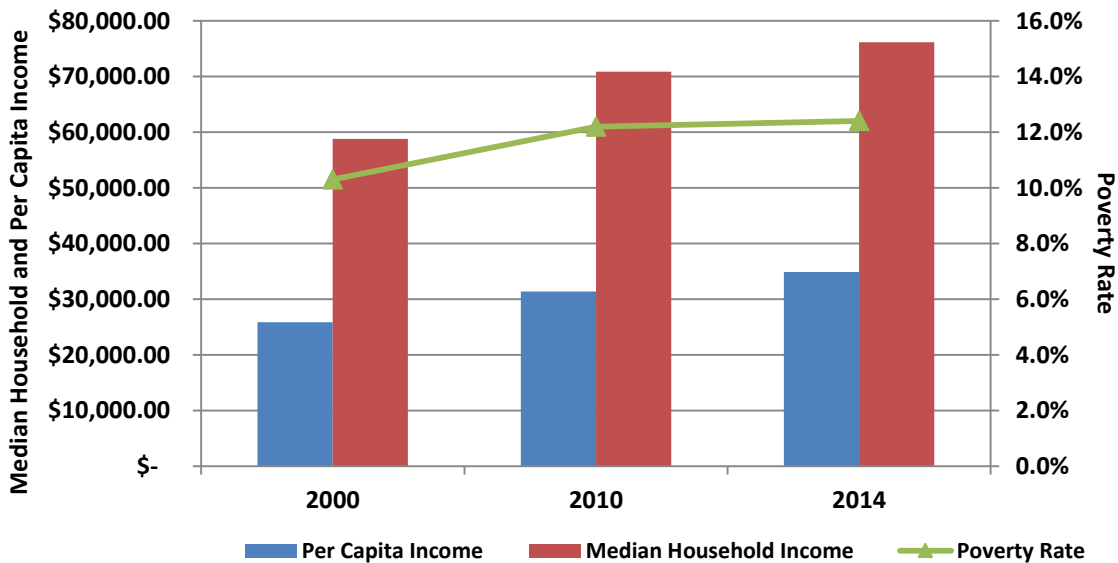
Occupational Title	Annual Average Salary				Annual Average Employment			
	Q1 2015	Q1 2014	Actual Change	Percent Change	Q1 2015	Q1 2014	Actual Change	Percent Change
Total, All Occupations	\$54,023	\$53,114	\$909	1.71%	1,484,500	1,452,430	32,070	2.21%
Management	\$126,128	\$127,877	(\$1,749)	-1.37%	95,330	89,960	5,370	5.97%
Business and Financial Operations	\$79,191	\$76,070	\$3,121	4.10%	97,150	95,750	1,400	1.46%
Computer and Mathematical	\$91,014	\$89,658	\$1,356	1.51%	47,500	48,280	(780)	-1.62%
Architecture and Engineering	\$90,578	\$89,992	\$586	0.65%	36,590	35,000	1,590	4.54%
Life, Physical, and Social Science	\$79,617	\$76,971	\$2,646	3.44%	14,100	14,190	(90)	-0.63%
Community and Social Services	\$52,098	\$50,525	\$1,573	3.11%	16,410	16,270	140	0.86%
Legal	\$108,900	\$111,188	(\$2,288)	-2.06%	11,820	12,040	(220)	-1.83%
Education, Training, and Library	\$61,325	\$59,873	\$1,452	2.43%	74,970	73,300	1,670	2.28%
Arts, Design, Entertainment, Sports, and Media	\$57,675	\$57,678	(\$3)	-0.01%	22,020	19,720	2,300	11.66%
Healthcare Practitioners and Technical	\$90,679	\$88,100	\$2,579	2.93%	66,290	64,770	1,520	2.35%
Healthcare Support	\$34,160	\$33,918	\$242	0.71%	33,300	33,470	(170)	-0.51%
Protective Service	\$47,434	\$50,504	(\$3,070)	-6.08%	24,790	22,870	1,920	8.40%
Food Preparation and Serving-Related	\$24,075	\$23,388	\$687	2.94%	142,890	136,920	5,970	4.36%
Building and Grounds Cleaning and Maintenance	\$27,079	\$26,300	\$779	2.96%	52,280	54,250	(1,970)	-3.63%
Personal Care and Service	\$26,159	\$27,055	(\$896)	-3.31%	40,830	37,010	3,820	10.32%
Sales and Related	\$46,565	\$44,668	\$1,897	4.25%	161,660	161,300	360	0.22%
Office and Administrative Support	\$40,522	\$39,845	\$677	1.70%	254,800	257,770	(2,970)	-1.15%
Farming, Fishing, and Forestry	\$22,203	\$22,597	(\$394)	-1.74%	1,550	1,630	(80)	-4.91%
Construction and Extraction	\$52,108	\$53,461	(\$1,353)	-2.53%	60,870	57,230	3,640	6.36%
Installation, Maintenance, and Repair	\$50,167	\$49,343	\$824	1.67%	44,690	43,990	700	1.59%
Production	\$34,118	\$33,756	\$362	1.07%	110,250	104,260	5,990	5.75%
Transportation and Material Moving	\$31,354	\$31,005	\$349	1.13%	74,400	72,450	1,950	2.69%

Source: OCBC Analysis of California EDD Data, QCEW Dataset

Income and Poverty Statistics

Orange County provides one of the highest median annual incomes in Southern California totaling \$76,163 in 2014, a \$5,283 increase over 2010 levels, same as an increase of 7.4 percent. In terms of per capita income, in 2014 Orange County residents earned an average of \$34,886, a \$3,513 increase or 11.2 percent above 2010 levels. Exhibit 6.1 demonstrates the trends for each type of income group, as well as the trend for the poverty rate since 2000. According to the U.S. Census Bureau, Orange County's poverty rate in 2014 was measured at 12.8 percent, which represents a decrease of 0.7 percent compared to the 2013 poverty rate of 13.5 percent. Despite this recent decrease, the poverty rate still stands 0.6 percent above the year 2010 and 2.5 percent above the year 2000. In addition, the cost of living in Orange County has been continually increasing over the past few decades. However, with wage growth failing to materialize, the county-level poverty rate may not fully capture the actual conditions of areas experiencing the highest level of poverty within the County, often referred to as "red zones".

Exhibit 6.1 O.C. Income and Poverty Rate of Individuals (2000-2014)

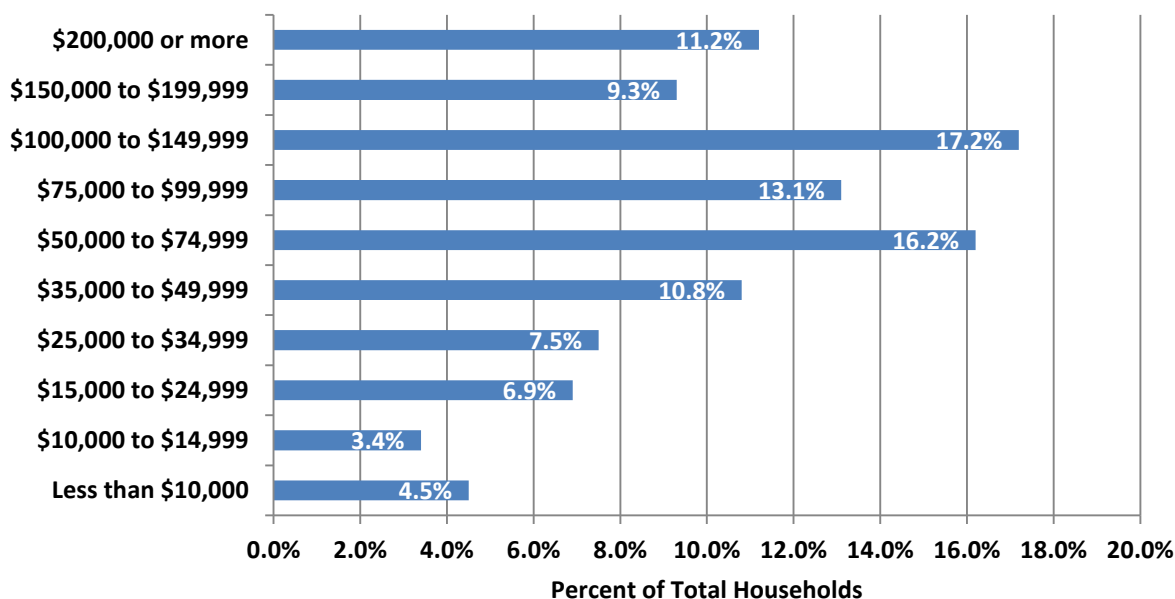


Source: Census Bureau, 2014 American Community Survey, 1-year Estimates

In order to provide a comprehensive assessment of household income levels in Orange County, Exhibit 6.2 shows the distribution of household earnings within predefined income groups. The largest income group range falls within the \$100,000 to \$149,999 bracket and describes 17.2 percent of households. This is followed by the \$50,000 to \$74,999 bracket, accounting for 16.2 percent of households in Orange County. Additionally, 37.7 percent of the households within

the County were making over \$100,000 in 2014 and 33.1 percent were making under \$50,000, far below the median household income measured in 2014. However, when, considering the high cost of living associated with Orange County, it is imperative to focus on low-income neighborhoods and families, to ensure that these groups have the resources necessary to live comfortably and the opportunities to join higher income brackets.

Exhibit 6.2 O.C. Household Income Groups



Source: Census Bureau, 2014 American Community Survey, 1-year Estimates

As previously indicated, the poverty rate in Orange County can be higher than previously anticipated; a notion which is reinforced by a new measure, the California Poverty Measure (CPM), developed by the Public Policy Institute of California (PPIC) and Stanford University. The CPM takes into account measures and trends specific to California, providing a more accurate reading of the cost of living, especially housing, in the state. Exhibit 6.3 provides a comparison between the official poverty rate as measured by the U.S. Census and the CPM, in addition to measures on neighboring counties. As of 2012, the CPM for Orange County was measured at 22.5 percent, which ranks Orange County with the tenth highest poverty rate out of forty-one counties within California. While Orange County's CPM was less relative to Los Angeles County (26.1 percent), it remained ahead of Riverside County (21.2 percent), San Bernardino County (20.6 percent), and the state average (21.8 percent). Additionally, it is concerning to note that the differential between the Orange County CPM and the official poverty rate measured by the U.S. Census was 9.5 percent, higher than both neighboring counties and the state average. This large differential poses several risks to the County since, depending on which measure is assessed, a much different story can be told regarding the economic prosperity and quality of

life within the County. Additionally, if policy makers adhere to the official poverty rate of 13 percent in Orange County, instead of the 22.5 percent CPM, they may not fully realize the current and potential future economic impacts associated with an increased poverty rate. In turn, the policies and regulations they impose may have significantly different outcomes than originally estimated. On a better note, the percent of Orange County children ages 17 and below in poverty was measured at 17.9 percent, much lower than neighboring counties, the state rate of 24 percent, and national rate of 22.6 percent.

Exhibit 6.3 Poverty Rates by Region (2012)

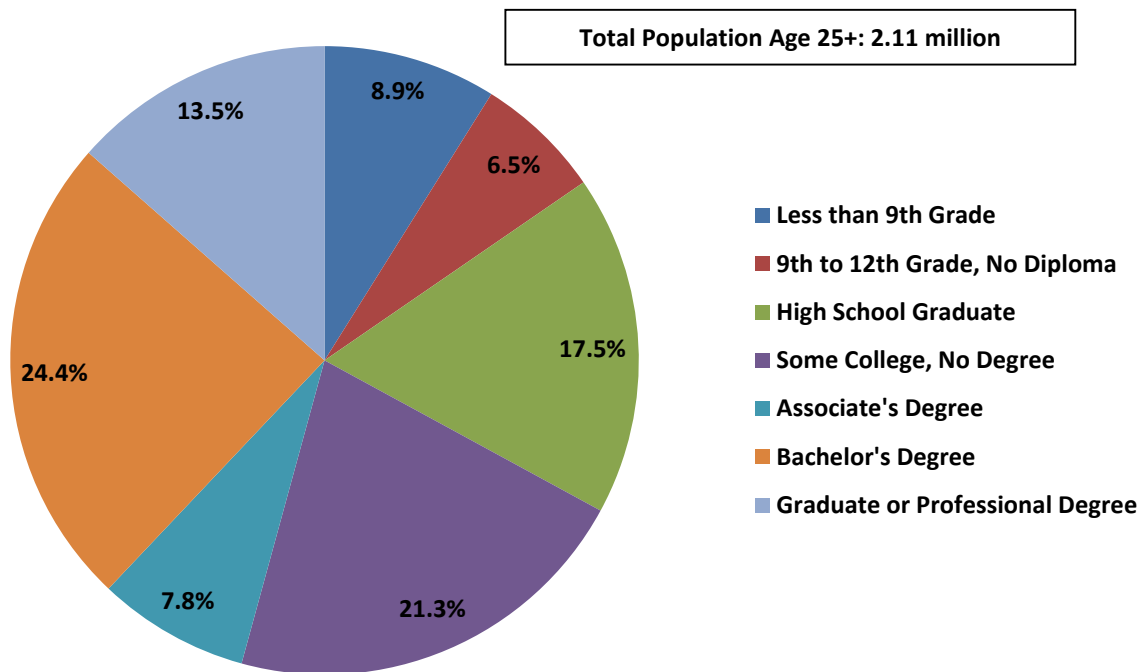
Poverty Rates by Region, 2012				
County	Percentage in Poverty, Official Poverty Rate Measure	Percentage in Poverty, CPM Measure	Differential	Percentage of Children Ages 17 and Below in Poverty, Official Rate
Orange	13.0%	22.5%	9.5%	17.9%
Los Angeles	18.9%	26.1%	7.2%	27.1%
Riverside	17.6%	21.2%	3.6%	24.7%
San Bernardino	20.5%	20.6%	0.1%	29.4%
California	16.9%	21.8%	4.9%	24.0%
United States	15.9%			22.6%

Source: American Community Survey, Public Policy Institute of California, and Stanford Center on Poverty and Inequality

Educational Attainment Demographics

A large portion of the economic prosperity experienced in Orange County during recent decades can be attributed to the educational attainment of its workforce. The County's well-educated workforce has greatly contributed to the attraction and retention of world renowned organizations and has helped highlight Orange County as a hub for several high-technology industries including biotechnology, semiconductors and advanced manufacturing. Exhibit 7.1 displays the population percentage by educational attainment in Orange County for individuals above 25 years of age.

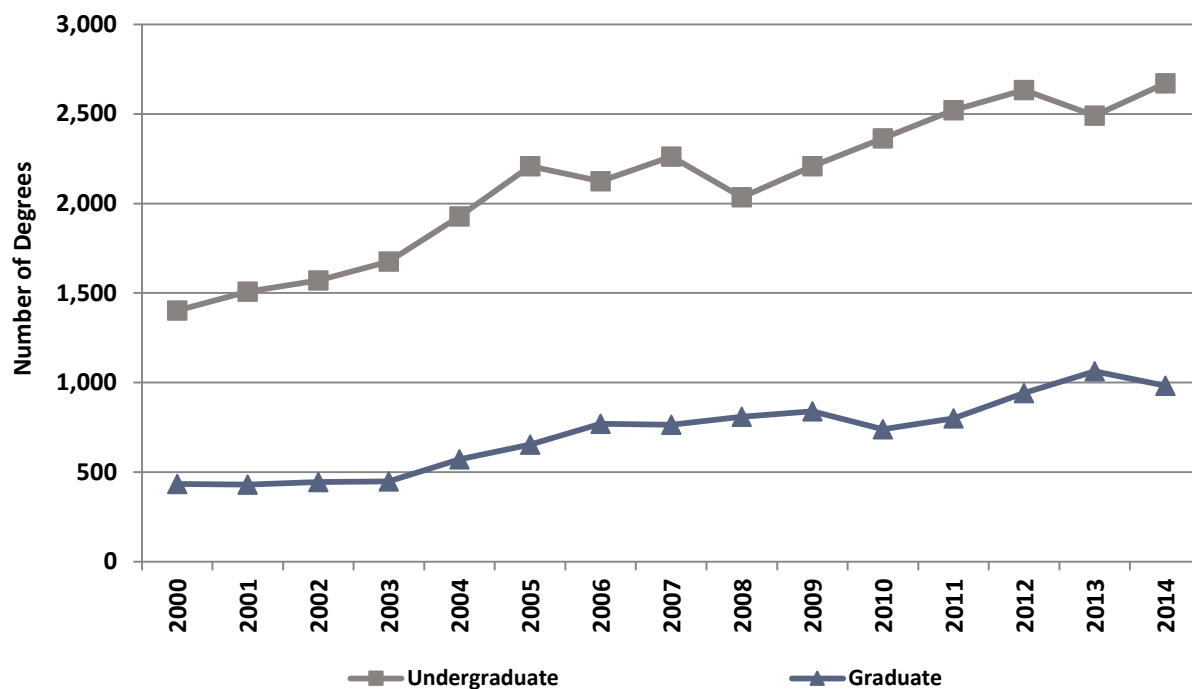
Exhibit 7.1 O.C. Educational Attainment, Population over 25 (2014)



Source: Census Bureau, 2014 American Community Survey, 1-year Estimates

As indicated in Exhibit 7.1, Orange County's workforce is well-educated with 45.7 percent of the County's population, aged 25 and over, having obtained at least an Associate's degree, and 84.5 percent have obtained at least a high school diploma. The three largest groups are those holding a Bachelor's Degree, high school diploma, and those who have attended college but have not yet obtained a degree.

Figure 7.2 O.C. Tech-Related Degrees Granted (2000-2014)



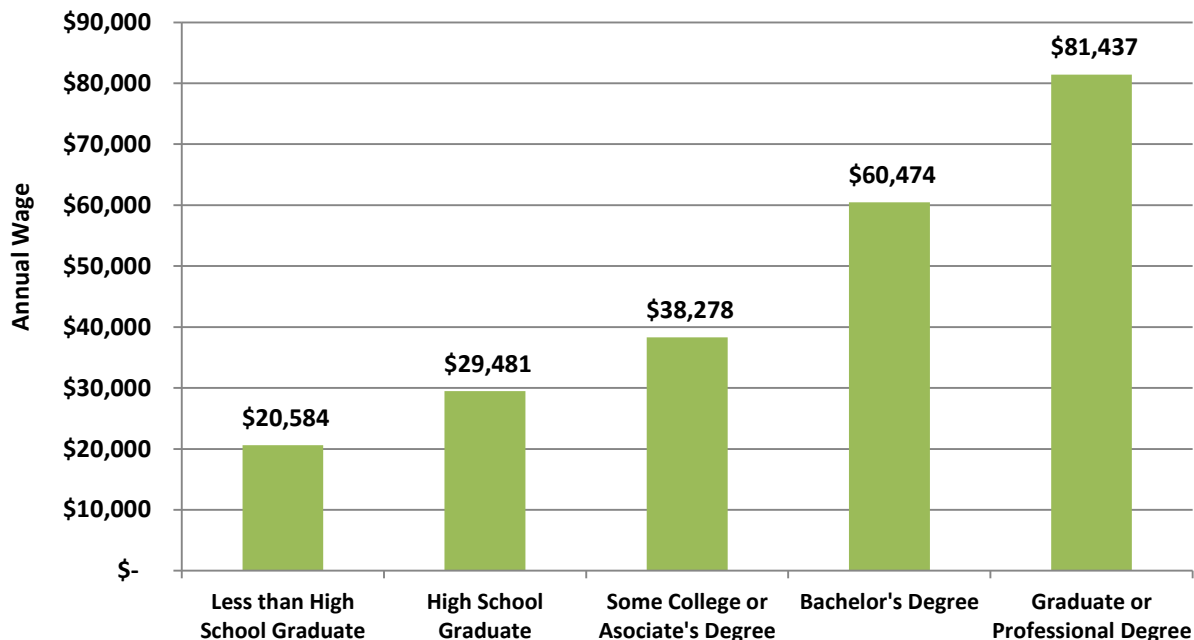
Source: University of California, Irvine; Chapman University; California State University, Fullerton

Considering the continued importance of technology in today's business environment, it is crucial that the County's workforce be well-versed in this field. The table above provides a snapshot of the number of technology-related degrees granted by the three major educational institutions in the County, which include University of California, Irvine; Chapman University; and California State University Fullerton. Since 2000, the number of tech-related degrees provided on an annual basis has increased substantially from 1,402 undergraduate degrees and 434 graduate degrees to 2,671 undergraduate degrees and 983 graduate degrees in 2014. Orange County has historically always provided a deep pool of talented workers to local businesses and as information technology continues to grow in importance both regionally and nationally, there will be stronger demand for individuals with tech-related backgrounds and degrees. While individuals with these qualifications are growing, the necessity for a concerted effort to offer increased educational and training programs to a larger portion of the local workforce is required. This is especially applicable to those who cannot afford the high fees required to attain a four-year education.

As individuals enhance their academic backgrounds, the potential for vertical and positive horizontal career moves increases which, in turn, improves overall earnings. Exhibits 7.3 and 7.4

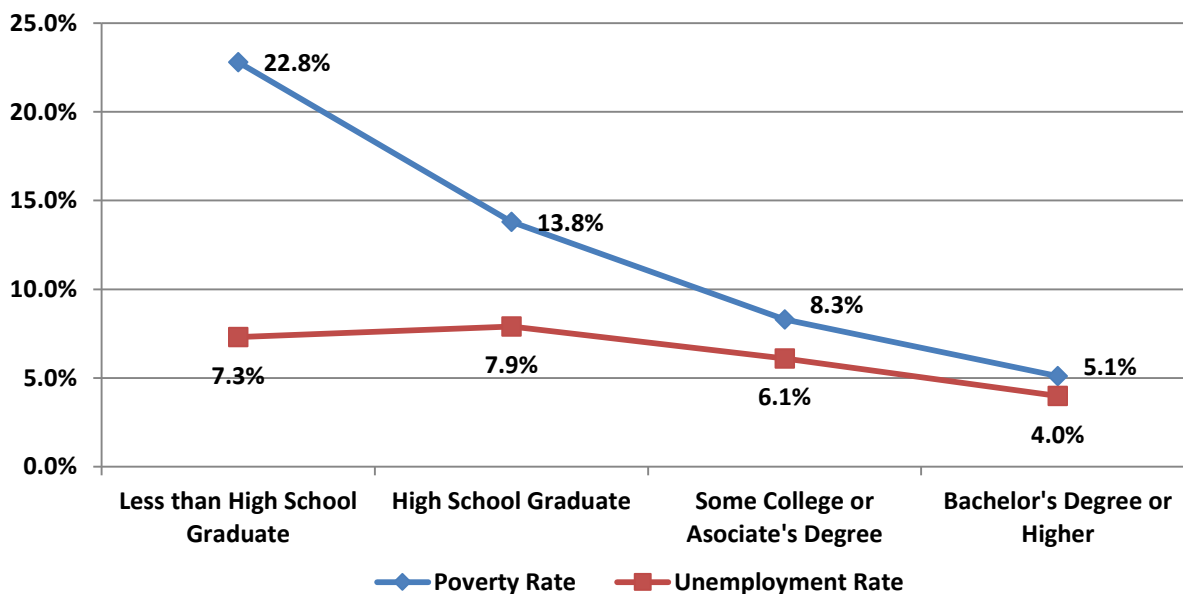
demonstrate the wage growth and economic mobility associated with increased educational attainment.

Exhibit 7.3 Median Wages by Educational Attainment, Workers over 25 (2014)



Source: Census Bureau, 2014 American Community Survey, 1-year Estimates

Exhibit 7.4 Unemployment & Poverty Rates by Educational Attainment (2014)



Source: Census Bureau, 2014 American Community Survey, 1-year Estimates

Housing Market and Construction Activity

Despite the continued increase of home prices over the past few years, the Orange County housing market is undergoing a shift brought on by increased job creation and population growth. To accommodate this trend, the County requires more multi-family housing units relative to new single-family detached homes. According to the California Association of Realtors (CAR), the median price of an existing single-family detached home in Orange County was \$707,700 in September 2015, an increase by 34.9 percent over August 2008's median price of \$524,594. More recently, home prices in Orange County have increased by 4.9 percent since January, 2015, though home pricing in July, 2015 indicates a 2 percent decline. Looking at recent home sales growth, CAR estimates that monthly sales in 2015 have been increasing by an average of 3.8 percent per month. Continued increases in home prices and home sales throughout 2015 point to a healthy housing market in the County, and while activity remains below pre-recession levels, the relatively consistent recovery indicates a strengthening market with a solid foundation.

To provide a comprehensive snapshot of the Orange County housing market, Exhibit 8.1 highlights the evolution of Orange County home prices for both new and existing homes. According to CoreLogic, as of September 2015, the average home price of new and existing homes was \$615,000, an increase of less than one percent when compared to the previous months' reading of \$610,000.

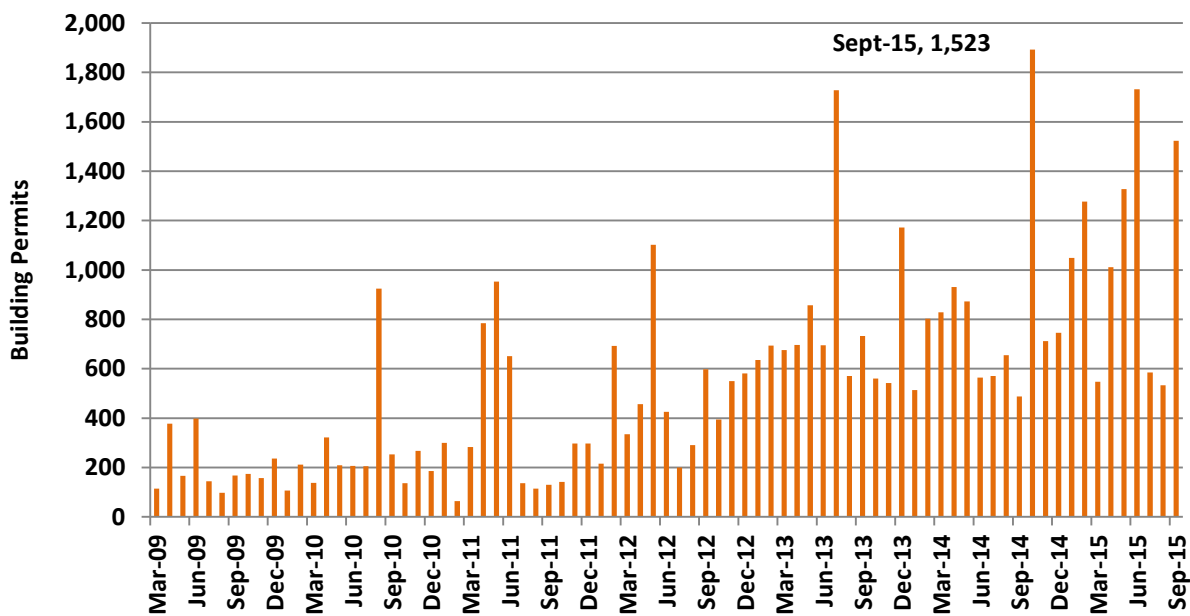
Exhibit 8.1 O.C. Median Home Prices (2008-2015) New vs. Existing Homes



Source: California Association of Realtors, DataQuick

Between 2009 and 2012, Orange County experienced significant setbacks in the creation of new housing units. However, the total number of housing permits issued has increased from 800 units per month in 2014 to over 1000 units per month in 2015. Of the total number of building permits issued in 2015, Irvine accounted for the largest portion with 4,179 permits or 43.6 percent of all building permits issued in Orange County. Other cities in Orange County that have issued a significant number of building permits include Anaheim, Aliso Viejo, Huntington Beach, Santa Ana, and Lake Forest. This suggests that the number of new housing units in Orange County is widespread geographically, though Irvine has served as the main contributor due to the high density of businesses, presence of the University of California Irvine, and multi-family developments in the area.

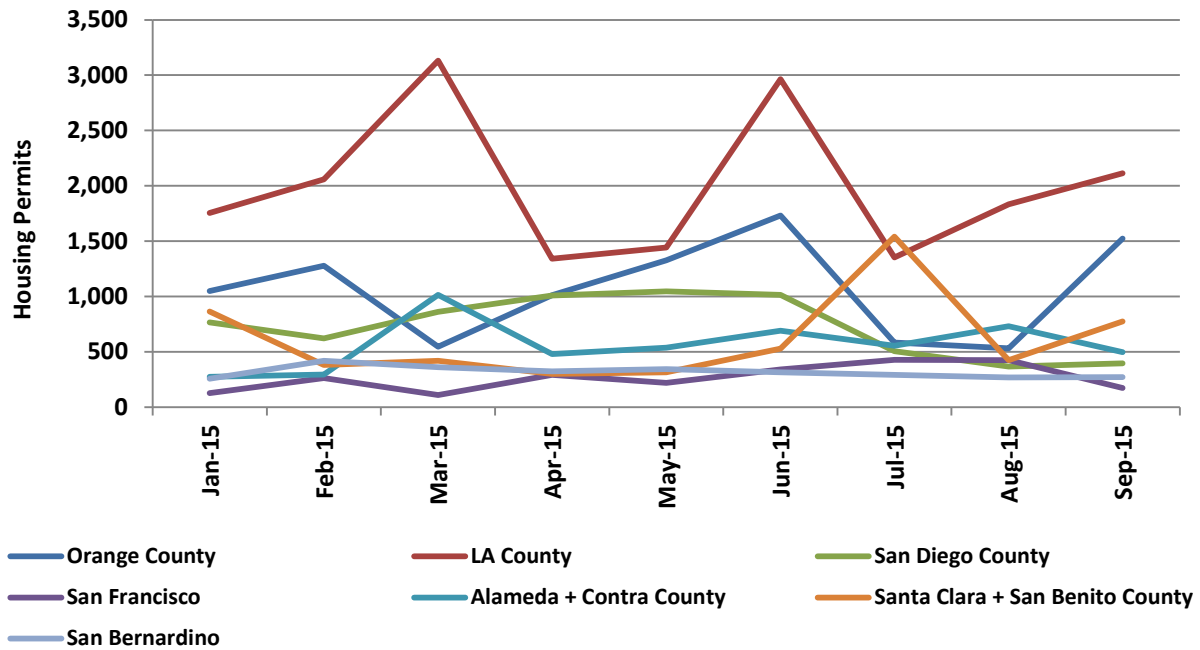
Exhibit 8.2 O.C. Housing Permits (2009-2015)



Source: U.S. Census Bureau CenStats

Thus far in 2015, Orange County has issued 9,585 building permits, second highest relative to neighboring counties. Within the same time period Los Angeles County has issued 17,994 building permits, the highest in the region. Exhibit 8.3 provides a comparison of monthly building permits issued during 2015 for the major counties in the state. Despite the relatively high number of building permits issued in Orange County during the start of 2015, in more recent months building permit activity has declined from 1,732 permits in June 2015 to 585 permits in July 2015, and 533 permits in August 2015. Yet, the most recent reading for September 2015 indicates resurging building permit activity registering 1,523 permits for the month.

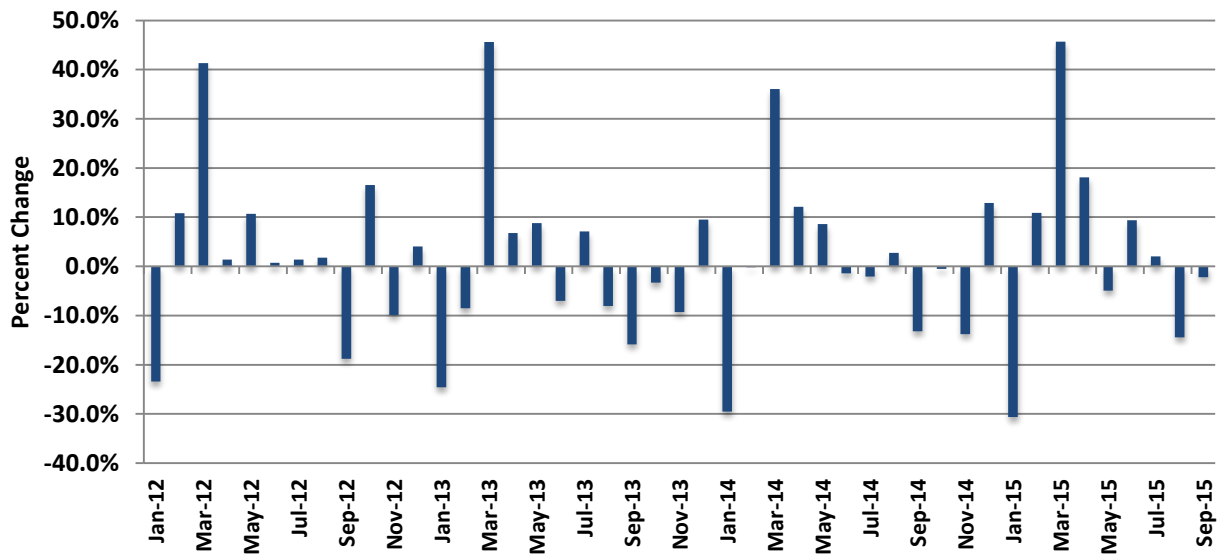
Exhibit 8.3 Residential Building Permits by County (2015)



Source: U.S. Census Bureau Censtats

Providing more evidence of continued recovery in Orange County's housing market, Exhibit 8.4 shows that sales rates, month-over-month, slowed with higher market prices in 2014, and growth surged in early to mid-2015 as home prices began to slowly regain its strength.

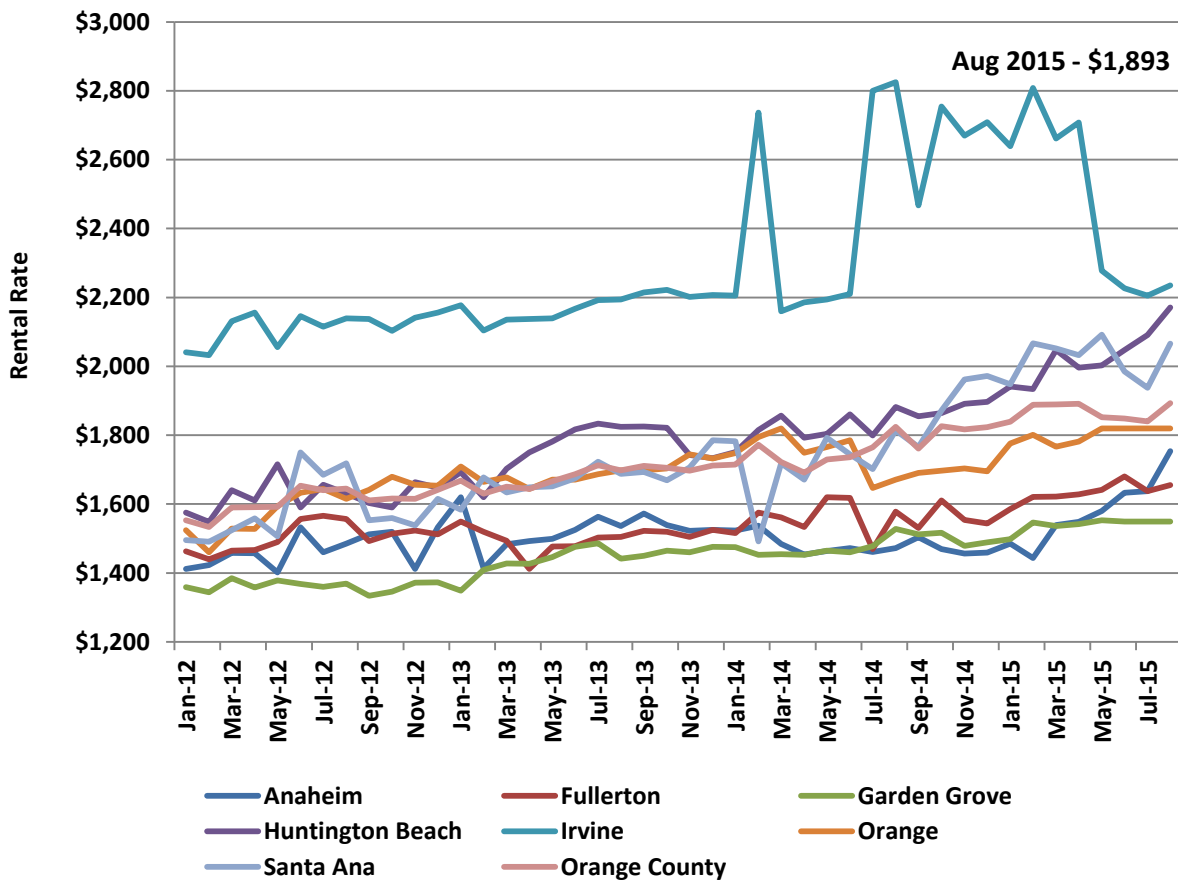
Exhibit 8.4 Single Family Home Sales, Month-Over-Month Percent Change



Source: California Association of Realtors

In addition to increases in home prices, apartment rental rates in Orange County have also surged recently, especially since the beginning of 2014. Since January 2014, the average rental rate in Orange County has increased from \$1,714 to \$1,893, an increase of \$178, with the largest contribution coming from Huntington Beach where rental rates increased by \$420 during the same time period. In regards to total monthly rent, Irvine had the highest rental rate with \$2,235 per month, followed by Huntington Beach and Santa Ana with \$2,171 per month and \$2,066 per month, respectively. On a month-to-month basis, from July 2015 to August 2015 the largest rental rate increase came from Santa Ana with an increase of \$128, followed by Anaheim with an increase of \$116. On a year-over-year basis, the largest growth in rental rates, between August 2014 and August 2015, was in Huntington Beach which increased by \$289, followed by Anaheim which increased by \$282, and Santa Ana which increased by \$252. Surprisingly, rental rates in Irvine dropped significantly, by approximately \$590 over the past year.

Exhibit 8.5 O.C. Average Apartment Rental Rates by City



The general rise in rental rates is mostly due to the increase in demand for rental properties resulting from the inability for Orange County residents to afford single-family homes. The Traditional Housing Affordability Index (HAI) released by CAR, measures, by county, the percentage of households that can afford to purchase an existing home in California. Orange County has consistently had the lowest housing affordability out of all Southern California counties, with only 21 percent of the population being able to afford an existing home as of Q2, 2015. This affordability rate is much lower than that of Los Angeles County (30 percent), Riverside County (40 percent), and San Bernardino County (56 percent).

CAR also releases a similar index for first-time home buyers and, again, Orange County ranks lowest in terms of housing affordability relative to all the counties in Southern California, at 43 percent in Q2, 2015. Other areas have much higher affordability rates for first-time home buyers such as Riverside County with 61 percent, and San Bernardino with 73 percent. Historically, inland counties have experienced much slower home price growth than coastal counties which, in recent years, has served to attract a growing number of people into the area. These individuals are looking to take advantage of the cheaper home prices while still working in areas that typically provide higher than average wages.

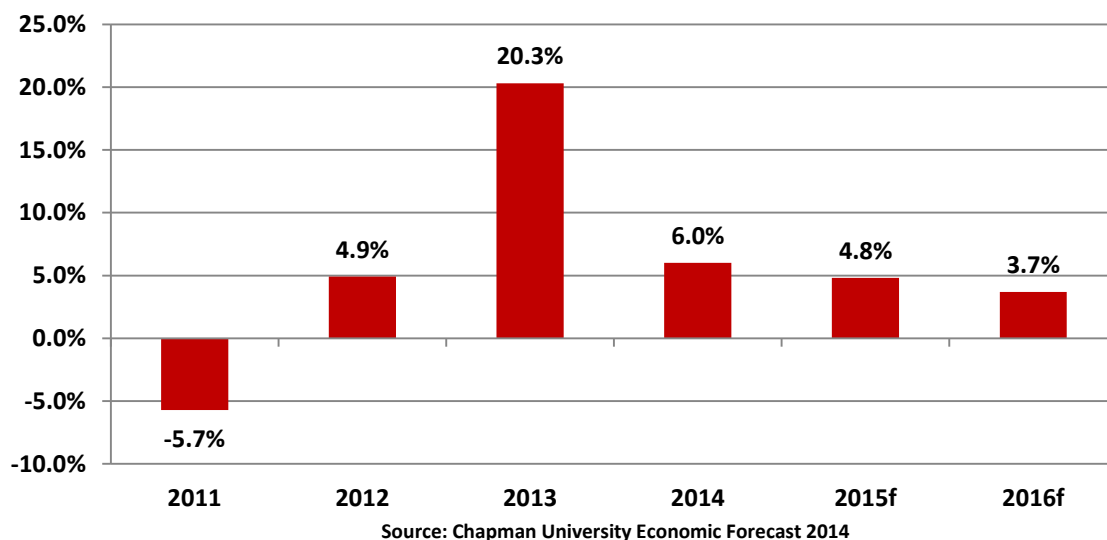
Exhibit 8.6 California Association of Realtors Affordability Index

California Association of Realtors Affordability Index						
Traditional Affordability Index				First-Time Home Buyer Affordability Index		
County	Q2 2015	Q1 2015	Q2 2014	Q2 2015	Q1 2015	Q2 2014
Orange County	21	22	20	43	45	44
Los Angeles	30	31	30	51	52	52
Riverside County	40	42	41	61	63	63
San Bernardino	56	58	58	73	75	76
San Diego	25	28	26	47	51	50
Ventura	25	28	28	49	52	54

Source: California Association of Realtors

Looking forward, research conducted by the Chapman University estimates that median home prices in Orange County will continue to rise over the next few years. After dropping by an estimated 5.7 percent in 2011, home price growth spiked in 2013 increasing by 20.3 percent and in 2014 reached more traditional growth rates around 6.0 percent. For 2015 and 2016, Chapman University expects home price growth to be around 4.8 percent and 3.7 percent, respectively.

Exhibit 8.7 O.C. Housing Prices: Annual Percentage Change



In addition to the anticipated rise in home prices, LAEDC estimates that building permits activity in Orange County will total 11,400 in 2015, an increase of 12.9 percent over 2014 levels. In 2016, permit activity is estimated to increase further to 12,400, an increase of 8.8 percent. However, after a negative growth rate in 2014, the LAEDC is forecasting modest growth through 2016 compared to other regions. The largest building permit growth for 2015 and 2016 is expected to come from the Inland Empire, with an addition of approximately 12,900 new building permits in 2015, and increase of 33 percent compared to 2014 levels. In 2016, the number of building permits issued will increase to 15,900, an increase of 23.3 percent over 2015 levels. This reinforces the trend of more individuals opting to live in inland counties that provide comparatively lower housing prices than coastal counties while still providing access and proximity to gainful employment opportunities.

Exhibit 8.8 LAEDC: Total Housing Permits Comparison

Year	Total Housing Permits					% Annual Change				
	L.A. County	Orange County	Inland Empire	Ventura County	LA-5	L.A. County	Orange County	Inland Empire	Ventura County	LA-5
2004	26,935	9,322	52,696	2,603	91,556	26.4%	0.1%	22.5%	-28.4%	18.5%
2005	25,647	7,206	50,818	4,516	88,187	-4.8%	-22.7%	-3.6%	73.5%	-3.7%
2006	26,348	8,371	39,083	2,461	76,263	2.7%	16.2%	-23.1%	-45.5%	-13.5%
2007	20,363	7,072	20,457	1,847	49,739	-22.7%	-15.5%	-47.7%	-24.9%	-34.8%
2008	13,704	3,159	9,101	842	26,806	-32.7%	-55.3%	-55.5%	-54.4%	-46.1%
2009	5,653	2,200	6,685	404	14,942	-58.7%	-30.4%	-26.5%	-52.0%	-44.3%
2010	7,468	3,091	6,269	590	17,418	32.1%	40.5%	-6.2%	46.0%	16.6%
2011	10,403	4,807	5,214	640	21,064	39.3%	55.5%	-16.8%	8.5%	20.9%
2012	10,709	6,862	6,034	410	24,015	2.9%	42.8%	15.7%	-35.9%	14.0%
2013	16,850	10,453	9,456	1,048	37,807	57.3%	52.3%	56.7%	155.6%	57.4%
2014e	18,000	10,100	9,700	1,000	38,800	6.8%	-3.4%	2.6%	-4.6%	2.6%
2015f	20,700	11,400	12,900	1,300	46,300	15.0%	12.9%	33.0%	30.0%	19.3%
2016f	24,300	12,400	15,900	1,600	54,200	17.4%	8.8%	23.3%	23.1%	17.1%

Sources: Construction Industry Research Board, California Homebuilding Foundation; forecasts by LAEDC

Nonresidential permits have followed similar trends as residential building permits in Orange County with strong growth in 2013 and 2014 and comparatively slower growth rates in 2015 and 2016. In 2015, nonresidential building permits are expected to total 2,060, an increase of 5.8 percent compared to 2014 and, in 2016, nonresidential building permits will total 2,240, an increase of 8.7 percent compared to projected 2015 levels. The Inland Empire is expected to again, outpace Orange County in the number of nonresidential building permits with growth of 13.4 percent and 11.5 percent in 2015 and 2016, respectively.

Exhibit 8.9 LAEDC: Private Nonresidential Construction Permits by Valuation

In Millions of Dollars

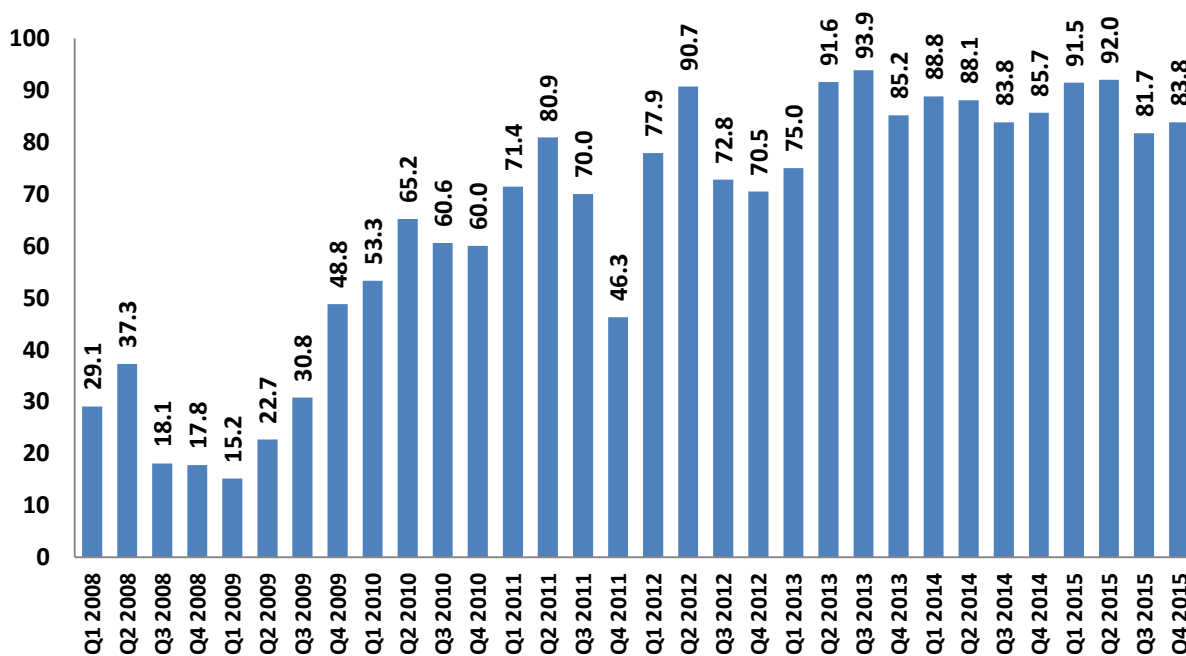
Year	L.A. County	Orange County	Inland Empire	Ventura County	L.A. 5-County	Annual % Change				
						Year	L.A. County	Orange County	Inland Empire	Ventura County
2004	3,174	1,133	2,485	353	7,145	2004	8.3%	12.6%	44.5%	-6.9%
2005	3,824	1,495	2,394	372	8,085	2005	20.5%	32.0%	-3.7%	5.4%
2006	3,896	2,401	2,852	326	9,475	2006	1.9%	60.6%	19.1%	-12.4%
2007	4,739	2,005	2,824	346	9,915	2007	21.6%	-16.5%	-1.0%	6.1%
2008	4,491	1,439	1,781	345	8,055	2008	-5.2%	-28.2%	-37.0%	-0.4%
2009	2,674	952	710	153	4,489	2009	-40.5%	-33.8%	-60.1%	-55.5%
2010	2,677	1,152	792	160	4,782	2010	0.1%	20.9%	11.7%	4.7%
2011	3,129	1,299	921	147	5,496	2011	16.9%	12.8%	16.2%	-8.4%
2012	1,836	1,263	1,074	127	4,300	2012	-41.3%	-2.8%	16.6%	-13.6%
2013	4,280	1,554	1,554	143	7,531	2013	133.1%	23.0%	44.7%	12.6%
2014e	6,674	1,947	1,605	128	10,354	2014e	55.9%	25.3%	3.3%	-10.5%
2015f	7,200	2,060	1,820	135	11,215	2015f	7.9%	5.8%	13.4%	5.5%
2016f	7,975	2,240	2,030	140	12,385	2016f	10.8%	8.7%	11.5%	3.7%

Sources: Construction Industry Research Board, California Homebuilding Foundation;
California Department of Finance, Economic Research Unit; forecasts by LAEDC

Other Predictions for Post-Recession Recovery

The Orange County Business Expectations Survey created by the California State University, Fullerton (CSUF) is a measure of the current view business owners, CEOs, and managers have regarding the future growth of the economy. The survey takes into account several measures including employment, revenues, operating profits, and investments. An index value over 50 indicates future growth in the local economy, while a reading below 50 indicates the future potential for contraction in the County. As demonstrated in Exhibit 9.1, Orange County executives were most confident for future economic growth in Q3 2013 when the OCBX hit 93.9; yet this optimism dropped in later quarters, averaging 86.6 per quarter in 2014. The OCBX then experienced a considerable jump in the beginning of 2015, increasing to 91.5 in Q1 2015 and 92.0 in Q2 2015 before falling back down to 81.7 in Q3 2015 and 83.8 in Q4 2015.

Exhibit 9.1 O.C. Business Expectations - OCBX

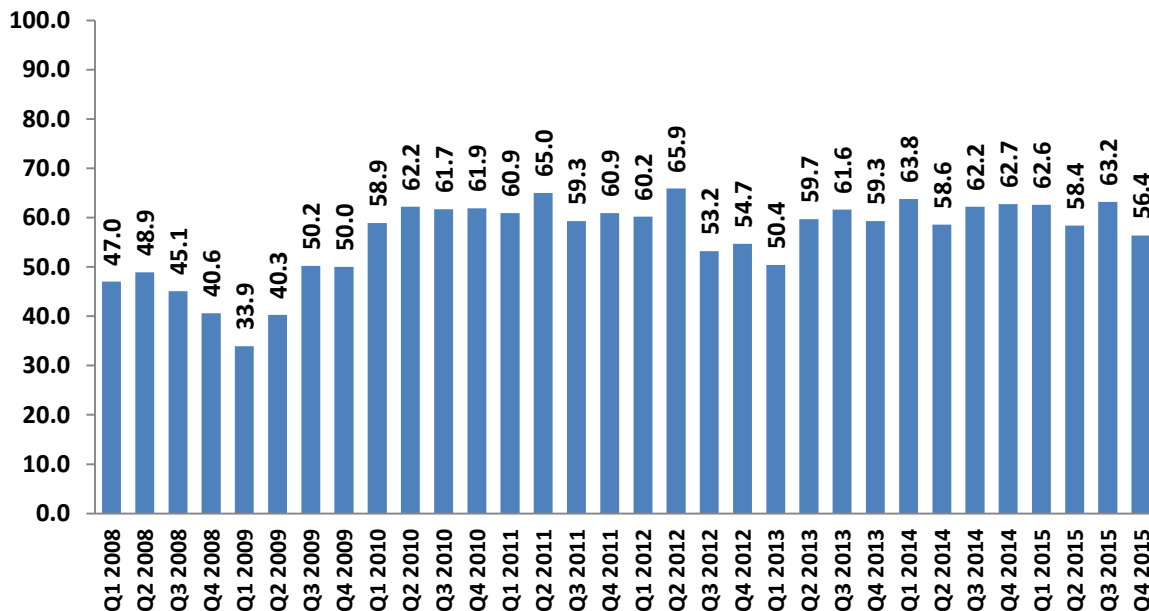


Source: CEAF, California State University Fullerton

An additional measure used to assess economic activity in Orange County is Chapman University's Orange County Manufacturing Composite Index, which measures overall manufacturing activity in the area by aggregating measures such as employment, new orders, inventories, and commodity prices. Exhibit 9.2 provides the Orange County Manufacturing Composite Index on a quarterly basis from 2008 to 2015. Here, measures above 50 indicate an expansion in manufacturing activity and readings below 50 indicate a contraction in manufacturing activity. As of Q4 2015, the Orange County Manufacturing Composite Index

measured 56.4, 6.8 points below the previous quarters reading and 9.5 points below the recorded value of 65.9 in Q2, 2012, the highest reading recorded since 2008.

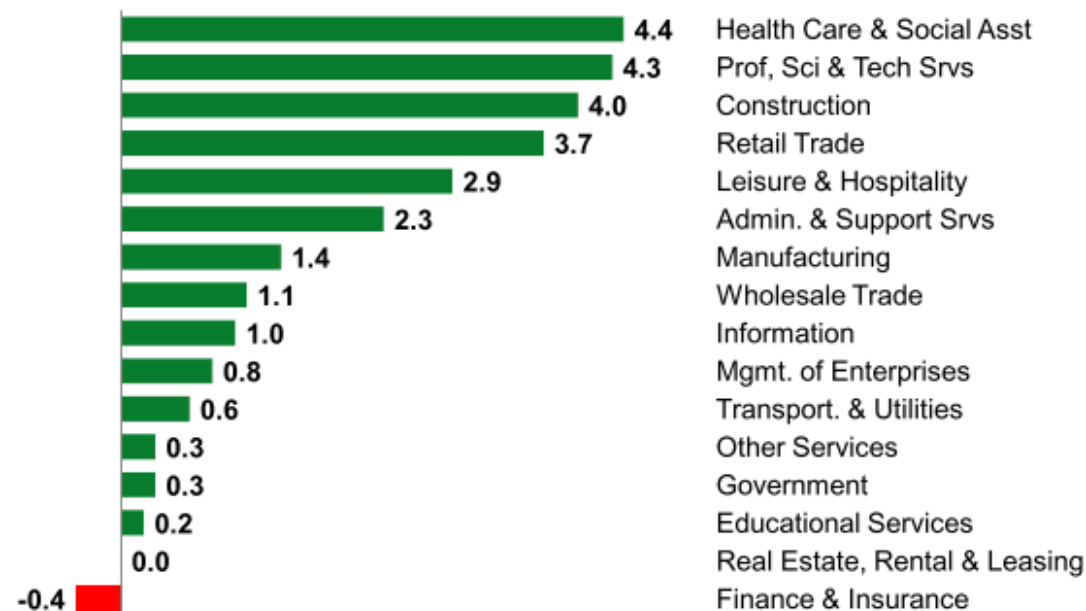
Exhibit 9.2 O.C. Manufacturing Composite Index



Source: Chapman University

As the economy continues its long recovery to pre-recessionary levels of economic activity and employment, the Los Angeles Economic Development Corporation (LAEDC) estimates that the majority of employment growth will stem from Health Care & Social Assistance, Professional, Scientific & Technical Services, and Construction industries. These three industries alone are expected to generate 12,700 or 48 percent of the 26,700 jobs estimated to be created in 2015. While nearly all industries are expected to generate positive employment growth for the County in 2015, Real Estate, Rental & Leasing is expected to remain stagnant, adding no jobs while the Finance & Insurance industry is expected to contract by 400 jobs. The stagnant state of real estate related occupations can most likely be attributed to the slowing home sales and new home construction experienced in 2014 and the beginning of 2015. Special attention should be placed on these stagnating and shrinking industries as these industries, especially those related to finance, typically provide higher than average salaries increasing their multiplier effects across the economy.

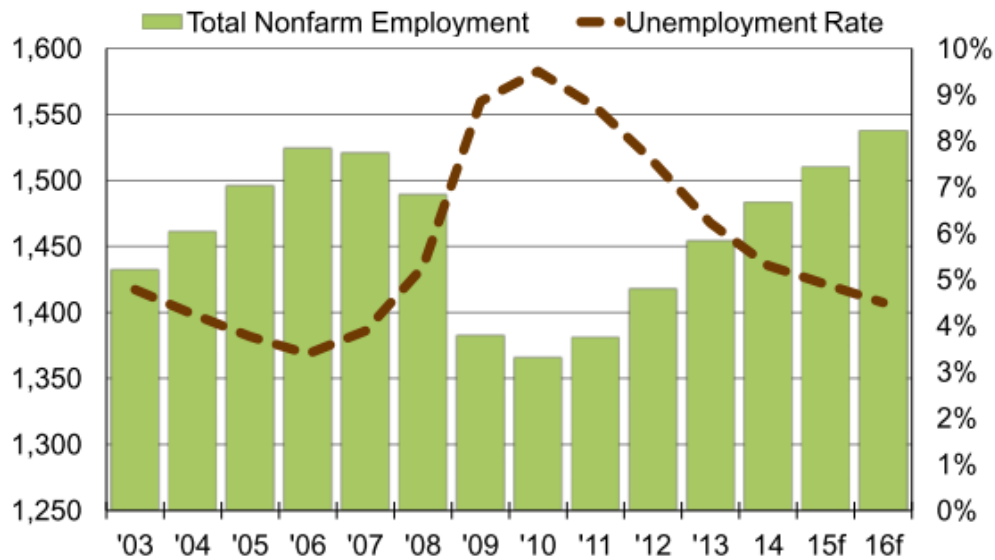
Exhibit 9.3 O.C. Employment Growth, 2015 Forecast (in Thousands of Jobs)



Source: LAEDC 2015 Economic Forecast

After years of muted employment growth, the LAEDC believes that Orange County is finally reaching pre-recessionary employment levels, a milestone the region is expected to achieve in mid to late 2015. As previously stated, according to the EDD, seasonally adjusted total employment in Orange County has surpassed pre-recession highs which fall in line with the LAEDC's employment estimates. Additionally as of September 2015, Orange County's unemployment rate reached 4.0 percent which also surpassed the 2007 averages of 4.1 percent. Exhibit 9.4 below provides LAEDC's nonfarm employment estimates for Orange County through 2016 and highlights the long employment recovery sustained in Orange County over the past decade. As employment prospects continue to improve in Orange County, the LAEDC expects that population growth will grow concurrently at 0.8 percent and 0.7 percent in 2015 and 2016, respectively. Coupled with the current housing recovery, LAEDC also expects taxable sales in the County to increase by 5.6 percent and 6.0 percent over the next two years suggesting continually increasing consumer spending and overall positive outlooks on the short-term growth of the economy. As in the past, Orange County's dominant industries will continue to drive employment growth and economic activity for the region.

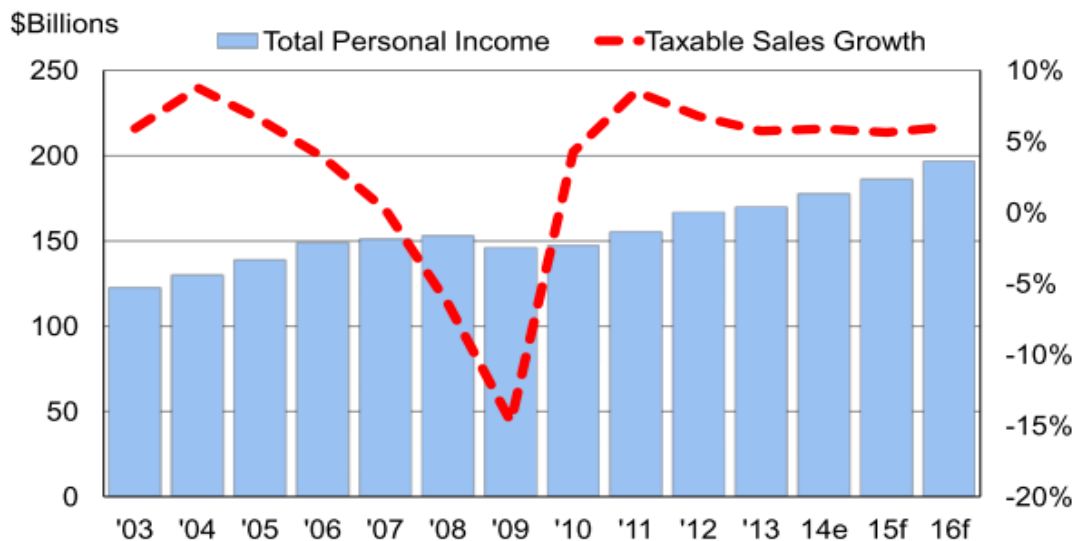
Exhibit 9.4 O.C. Employment Estimates (2003-2016f) (in Thousands of Jobs)



Source: LAEDC 2015 Economic Forecast

According to the LAEDC, total personal income in Orange County has experienced continued growth since 2010 and is expected to reach almost \$200 billion by 2016. Exhibit 9.5 demonstrates how the recession served to severely reduce total personal income and taxable sales growth. While total personal income is expected to continually grow over the next few years, taxable sales growth is expected to remain around 5 percent, suggesting retail sales will remain stable through 2016 - a positive sign indicating more traditional spending habits by Orange County residents.

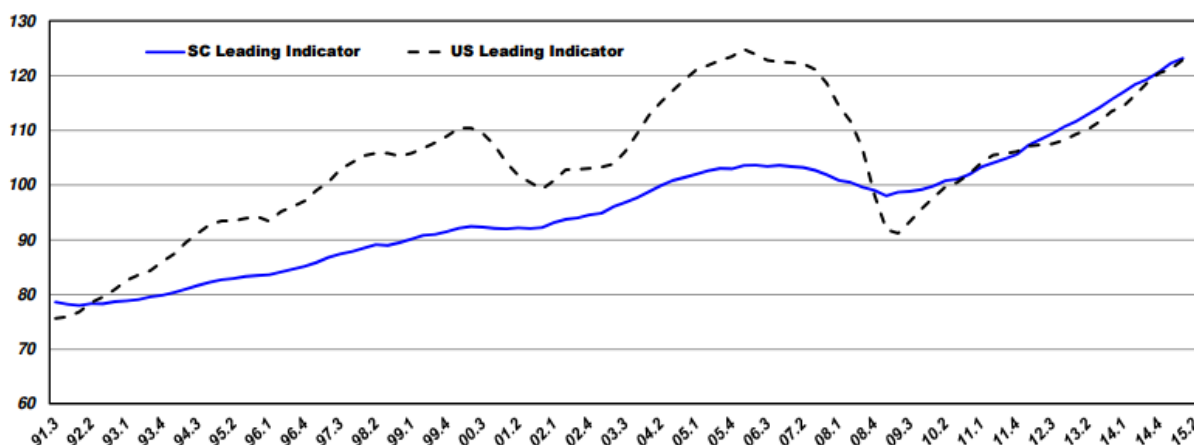
Exhibit 9.5 O.C. Personal Income Levels and Taxable Sales Growth (2003-2016f)



Source: LAEDC 2015 Economic Forecast

In addition to developing the Orange County Business Expectations, Cal State University Fullerton also created the Southern California Leading Indicator, a measure of economic activity in the nation and in Southern California. This index takes into account several indicators such as civilian employment, building permit activity, and the pacific consumer confidence index to predict economic activity. The index generally updates before actual changes in employment levels, making it a reasonable predictor of regional employment. As evidenced by Exhibit 9.6 below, the index is projecting an overall positive trend for Southern California, indicating increased economic activity over the next three to six months.

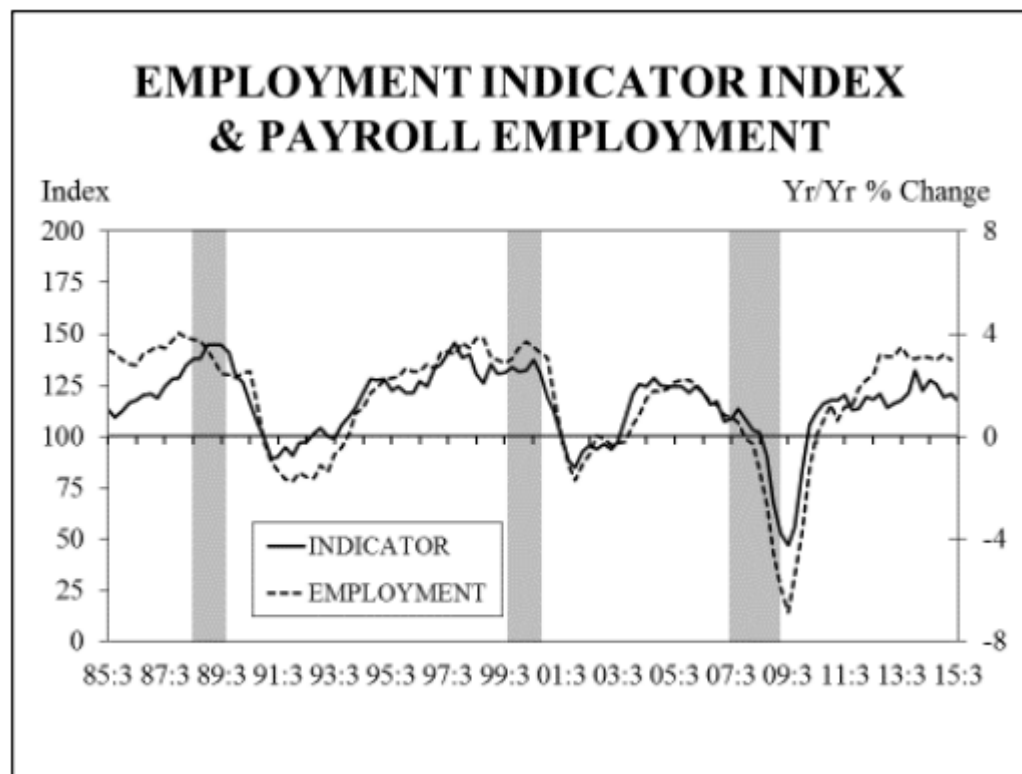
Exhibit 9.6 CSUF Southern California Leading Indicator



Source: California State University Fullerton

Further, the Employment Indicator & Payroll Employment Index, which is published by Chapman University, also estimates year-over-year growth for overall payroll employment in the state. This index, which is created by aggregating the changes in California's real GDP, real exports, the S&P 500, and construction spending in the state aligns with the general trend that Orange County and California will continue to enjoy increased employment levels and economic activity in the short term. The most recent measure for Q3, 2015, despite all indicators being positive, declined when compared to the prior quarter, though the positive value suggests continued economic and employment growth for the state.

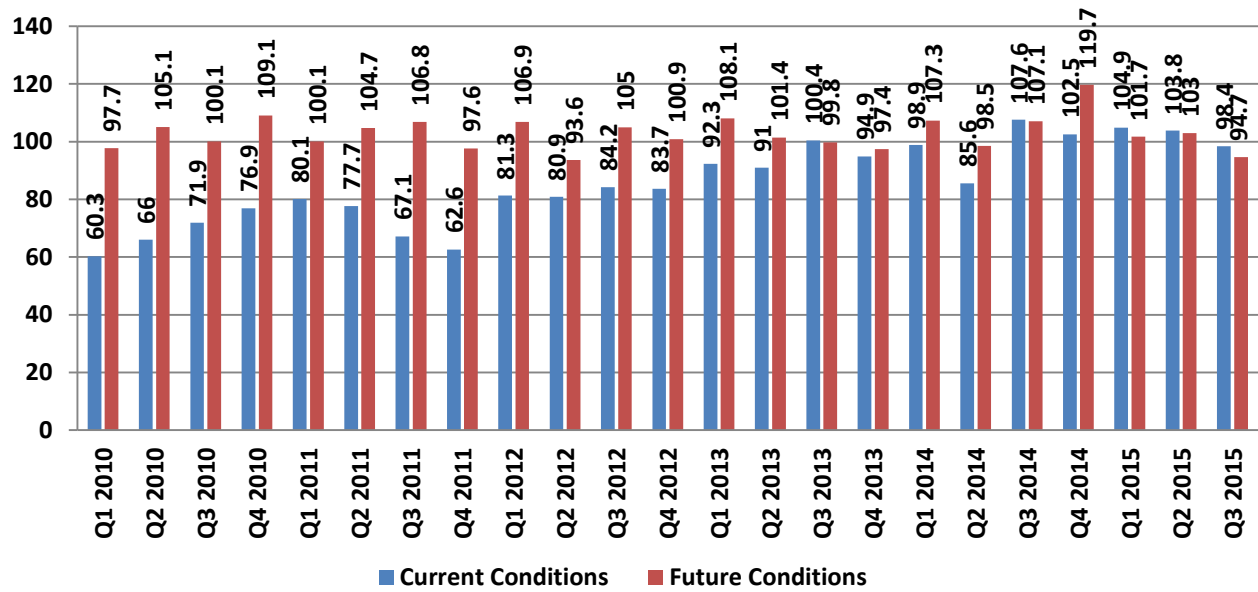
Exhibit 9.7 Chapman University Employment Indicator Index



Source: Chapman University

Despite the majority of economic measures pointing to continued economic and employment growth in the near future, Chapman University recently released its California Consumer Sentiment Index Current vs. Future Sentiments, which indicates that consumer confidence took a large hit in Q3, 2015. This index compares consumer attitudes on the present-day economy while taking into account their thoughts on future conditions. Exhibit 9.8 provides a quarterly look at the evolution of consumer sentiment in California since Q1, 2010, with readings above 100 indicating an overall positive view on the current or future of the regional economy. Evidence of the recession is clear with many of the current condition readings from 2010 to 2014 being below 100, suggesting there was clear dissatisfaction with the recovery period. Interestingly, many residents have remained optimistic about future conditions since 2010, made evident by many of the future condition readings being consistently over 100 for several quarters in a row. Looking at the most recent quarter, Q3, 2015 was the first quarter since Q3, 2014 where both current and future condition readings are below 100. This suggests that many individuals are relatively unsure about current economic conditions and are even less optimistic about future conditions.

Exhibit 9.8 California Consumer Sentiment Index Current vs. Future Sentiment



Source: Chapman University

Final Thoughts

In order for the County to continue on its growth trajectory it will need to ensure job growth, not only in low-wage sectors, but across all sectors so that more individuals are able to climb their respective career ladders. Such a strategy will help to fill in the middle-skill employment gap, currently harming Orange County business activity, while also helping to lift workers out of entry-level, low-wage positions. Additionally, as home prices and apartment rents continue to rise, it will be crucial that businesses provide their employees with higher, more livable wages to increase overall housing affordability in the County. Orange County's well-educated pool of workers is at risk of decreasing as these individuals, who often have student loans, are unable to afford the high housing prices associated with the region. As affordability continues to decrease, the County's ability to successfully attract and retain talented individuals will decline. Finally, emerging industries in the County such as Information Technology, Advanced Manufacturing, Creativity, and Green Technology should be actively supported as they provide a multitude of employment opportunities for a variety of skill levels. Additionally, these industries have significant multiplier effects on employment in other sectors which serves to further drive employment growth throughout the County.

Considering recent employment trends and the projections of numerous research reports and datasets that verify that Orange County surpassed pre-recessionary levels in mid-2015, it is crucial that businesses, community leaders, and policy-makers are aware of the shifting economic and demographic landscape. By gaining a firm grasp on the short- and long-term trends that are affecting the local economy, these individuals will be better prepared to make informed, impactful decisions aimed at improving economic activity and the quality of life for Orange County residents.